Fort Sam Houston

Development Document

for

Fort Sam Houston's

Draft Historic Properties Component of the

Integrated Cultural Resources

Management Plan

October 2002

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1.0 INTRODUCTION

The Historic Properties Component (HPC) is the portion of the Integrated Cultural Resources Management Plan (ICRMP) that relates to compliance with Section 106 of the National Historic Preservation Act (NHPA). Section 106 of the NHPA requires Federal agencies to take into account the effects of their undertakings on historic properties and afford the Advisory Council on Historic Preservation (Council) a reasonable opportunity to comment on such undertakings. The Section 106 process seeks to accommodate historic preservation concerns with the requirements of Federal undertakings through consultation between the Army and Section 106 participants. The HPC sets standards and guidelines that Fort Sam Houston will follow in its management of historic properties and provides procedures for determining and resolving the effects of undertakings on such properties. The purpose of this HPC is to enable compliance with Section 106 on a programmatic, as opposed to case-by-case, basis through certification to operate under the Army Alternate Procedures.

Under Section 800.14 of the Council's regulations at 36 CFR Part 800, "Protection of Historic Properties", Federal agencies can adopt, with the Council's approval, alternate procedures that may be used in lieu of the Council's procedures for compliance with Section 106. The Department of the Army has gone through this process and has adopted the Army Alternate Procedures to 36 CFR Part 800. The Army Alternate Procedures establishes a two-pronged approach to Section 106 compliance that allows an installation commander to select one of two processes to follow in complying with Section 106. An installation commander may either continue to use the Council's

procedures or may elect to comply with the Alternate Procedures and prepare a HPC to the ICRMP. Fort Sam Houston has elected to adopt the Alternate Procedures, and develop, with the input of consulting parties, this HPC.

The HPC sets standards and guidelines that Fort Sam Houston will follow in its management of historic properties and provides procedures for determining and resolving the effects of undertakings on such properties. The HPC is composed of three basic organizational elements: background data, standard operating procedures (SOPs) and appendices.

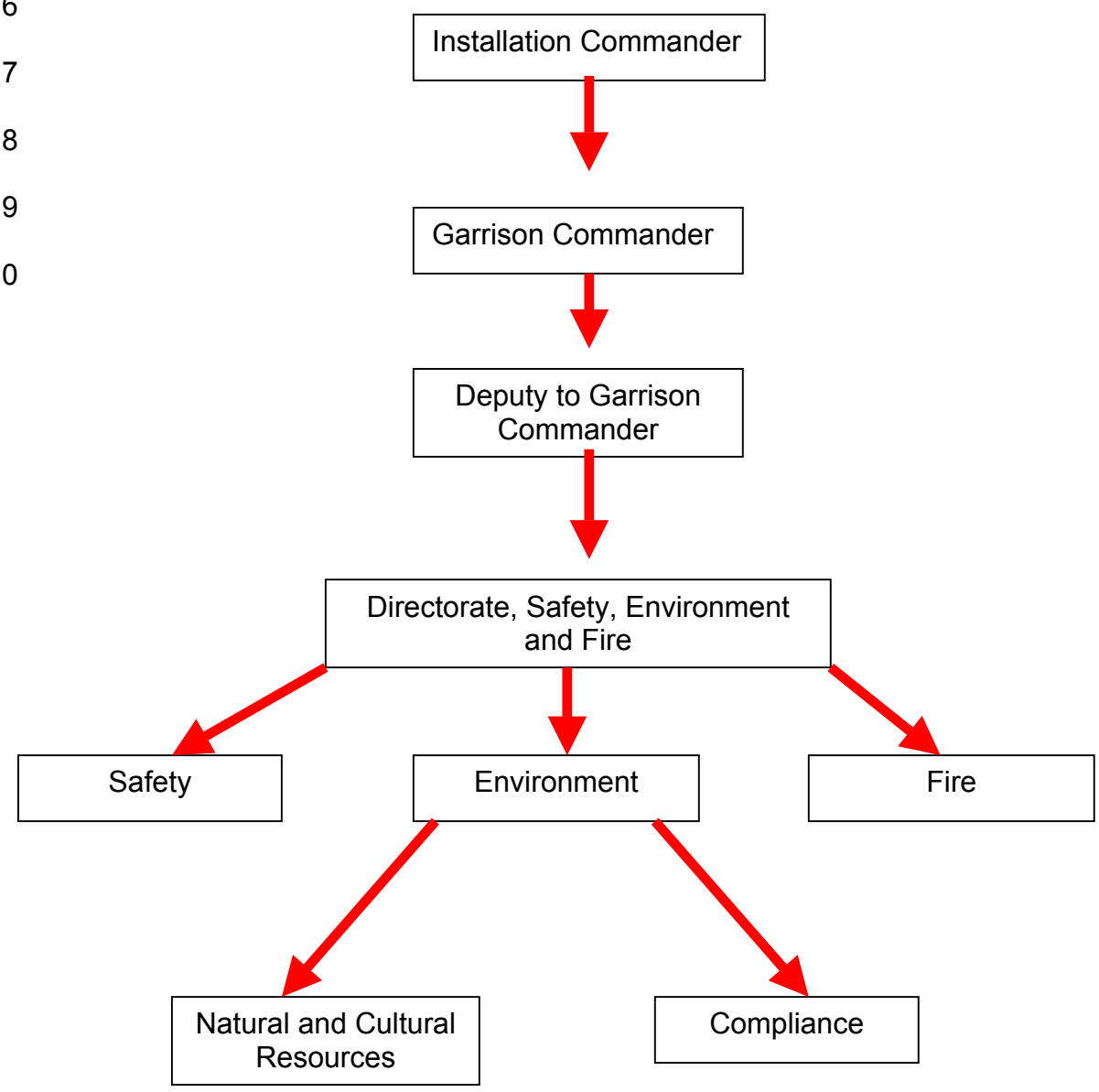
The background data includes: identification of the installation's cultural resources manager (CRM) and the Coordinator of Native American Affairs (if applicable); identification of parties that participated in the consultation for development of the HPC; information on Fort Sam Houston's past and present mission and the types of activities which may have an impact on historic properties; a "planning level survey", which presents what is presently known about the installation's natural and cultural environment and forms the basis for management decisions concerning historic properties; a summary of the categories of undertakings that Fort Sam Houston believes it will conduct over the 5-year period during which the HPC is in effect; a list of categorical exclusions that will not require review under Fort Sam Houston's compliance procedures; and management practices that will be carried out and implemented in Fort Sam Houston's day to day activities.

SOPs are the systematic actions that Fort Sam Houston will follow to consider the effects of its activities on historic properties and to manage them responsibly. The SOPs within Fort Sam Houston's HPC represent the "management plan" that Fort Sam Houston will follow in carrying out its Section 106 responsibilities under the AAP. As such, these SOPs have been prepared in consultation with consulting parties and explicitly detail how Fort Sam Houston will carry out its responsibilities.

1.1 Cultural Resources Manager and Coordinator for Native American Affairs position

The Cultural Resources Management Program is located within the Environmental Division (ED) of the Directorate of Safety, Environment, and Fire (DSEF)(Appendix C). Army policy in AR 200-4 Section 1.9(b), states that each installation have a Cultural Resource Manager (CRM) "to coordinate the installation's cultural resources management program. The installation commander will ensure that the CRM has appropriate knowledge, skills, and professional training and education to carry our installation cultural resources management responsibilities. The installation commander will also ensure that all cultural resources technical work is conducted by individuals who meet the applicable professional qualifications standards established by the National Park Service in 36 CFR 61, Appendix A." Fort Sam Houston will strive to maintain on-site technical expertise for cultural resources; when not possible, technical expertise will be obtained in accordance with SOP 10. The CRM provides day-to-day management for cultural resources, helps ensure that all installation activities are in compliance with applicable cultural resources requirements, serves as coordinator of cultural resources management activities with organizational elements and tenant

organizations, and oversees implementation of the ICRMP and HPC. Within the DSEF, the ED is responsible for the management of historic properties at Fort Sam Houston and reviews all projects to determine the effect on historic properties. The chain of command is illustrated below:



1.2 Installation Missions and Effects

1.2.1 Missions

Fort Sam Houston (FSH) maintains many separate but interlinking responsibilities. On one hand it is a major, active military installation that plays a vital role in the defense of the United States. On the other hand, it contains some of the oldest structures on any of the Army's installations. This blend of the old and new gives today's soldiers a share in the history of this post, which goes back almost a century and a half.

Quadrangle Entrance Gate, Building 16 (1879)

The post was shaped by the roles and missions performed there. Over the years, first one and then another of these missions predominated, but all have been performed from the earliest time up to the present.

- Headquarters: Command and control of a region or units;
- Garrison: Station for troop units;
- Logistical Base: Supplies, services, and support;
- Mobilization and Training: Preparing soldiers for combat, peacekeeping, and neutralization missions; and
- Medical Facility: Medical operations and training.

Today, Fort Sam Houston continues to carry out its five historic missions. Fort Sam Houston is a U.S. Army Medical Command (MEDCOM) installation, and the home of the U.S. Army Medical Department Center and School (AMEDD C&S). The principal mission activities at Fort Sam Houston support the medical readiness of the U.S. Army. The installation commander and garrison commander operate and administer the use of the resources of FSH, Camp Bullis (CB, a sub-installation of FSH), and the Canyon Lake Recreational Area (CLRA, a sub-installation of FSH) for the accomplishment of all assigned missions and to provide support to assigned, attached, and tenant units. The mission of Camp Bullis is to provide the ranges, field training areas, airspace, facilities, and necessary installation support to U.S. Department of Defense (DoD) authorized federal, state, and local government activities, particularly those associated with the training needs of FSH and its tenant organizations.

These missions are accomplished principally through five tenant organizations and the U.S. Army Garrison, which provides the headquarters function for the installation itself. An integral aspect of mission support is to facilitate compliance with applicable legal requirements in order to maintain the availability of property that is necessary to accomplish mission objectives.

The five organizations have the directive to accomplish the following assignments:

Army Medical Department Center and School (AMEDD C&S) services Army, DoD, and other Federal agency personnel and foreign allies by providing training and education in health care services.

Brooke Army Medical Center (BAMC) is a 1,340,000-square-foot hospital complex that provides a full range of medical and surgical care and medical research.

New Brooke Army Medical Center, Building 3600 (1995)

Medical Command's (MEDCOM) overall mission is to provide health care for Army and Reserve components and the training of military health care personnel. MEDCOM activities at FSH are primarily administrative; subordinate organizations that fall under the responsibility of HQ serve as the actual providers of medical services and training.

MEDCOM Headquarters, Building 2792 (1939)

Headquarters, Fifth U.S. Army assists, evaluates, and synchronizes all training support activities for Reserve component units west of the Mississippi River. It also plans, coordinates, and executes mobilization operations and coordinates military support to civil authorities.

Headquarters, Fifth Recruiting Brigade is the organization responsible for overall Army recruiting in New Mexico, Oklahoma, and Texas, in addition to being responsible for several specialized programs.

Fort Sam Houston is slated to become the Headquarter for the Southwest Installation Management Region under the Transformation Installation Management (TIM) initiative. Fort Sam Houston is home to approximately 15,988 military, 5,629 Department of Defense civilian, and 7,593 other civilian personnel.

1.2.2 Mission-related Activities and Effects

This section provides explanations of the types of undertakings and actions that can potentially impact historic properties at Fort Sam Houston. Undertakings are defined in the National Historic Preservation Act (NHPA) of 1966 (16 USC 470-470w) as “any

Federal, Federally assisted, or Federally licensed action, activity, or program, new or continuing, that may have an effect on National Register resources and thereby triggers procedural responsibilities." Undertakings that may affect historic properties that are potentially eligible, eligible, or are listed on the National Register of Historic Places require a Section 106 review under the NHPA. The standard for evaluation is whether or not the proposed undertaking will affect a potentially eligible or eligible historic property such that its eligibility will be compromised.

The overall mission of FSH includes several discrete activities, including the capacity to function as:

- A major Army command and control operation;
- A center for premier medical training facilities;
- A state-of-the-art medical care center;
- A major mobilization station for the U.S. Army in the event of a national or regional emergency requiring a reserve call-up; and
- An established military complex with the capability to support other unforeseen national contingencies.

The broad categories of activities associated with FSH can be broken down into: administration and support; construction (including demolition); operations and maintenance; light industry; research, development, test and evaluation (RDT&E); medical services; recreation; and training. The installation cantonment areas are comprised of all the facilities and infrastructure that support a functioning military

community. The following routine undertakings or actions within cantonment areas may affect historic properties:

- Maintenance of historic buildings, structures and landscapes;
- Administration of family housing, since such housing may be historic, or may be constructed in culturally sensitive areas, including privatization of housing under the Residential Communities Initiative (RCI);
- Accessibility programs that can impact historic properties;
- Energy conservation programs that can result in the demolition or substantial alteration of historic buildings and structures;
- Hazardous materials removal that can damage historic properties;
- Maintenance and repair, or outleasing of utilities that can alter historic buildings, structures, and landscapes, or damage or destroy archeological sites;
- Road maintenance that involves ditching or culvert placement that can disturb or destroy archeological sites;
- Routine grounds maintenance that can damage historic properties;
- Changes in the use of historic properties;
- Master planning and other planning activities, which shape the development of installations and the treatment of historic properties;
- Construction of new facilities, such as buildings, utility corridors, access roads, erosion control structures, golf courses, landing strips, and training ranges or complexes that can impact historic properties

- Demolition of historic properties.

The following routine undertakings or actions in the military training areas may affect historic properties:

- Tactical Training
  - Tactical training will comprise several different formats including use of 11 maneuver areas and 22 firing ranges (for a variety of types of small arms, mortars, mini-mortar, light anti-tank weapons, grenade launchers, hand grenades, and claymore mines).
- Field Training
  - Field training includes survival, escape, and evasion training conducted over much of the installation.
- Logistic Support Activities
  - Logistical support for training (engineering support; ITAM support; cultural and natural resources support; Operations and Range Control; and Morale, Welfare, and Recreation).

The maintenance of normal site activities at CB will require the following types of actions:

- Demolition of underutilized, inadequate, or dilapidated facilities (as identified by the Facility Reduction Program);
- Reuse of underutilized facilities through traditional and lease programs;
- New construction of facilities including training parks; and

- Maintenance and repair of existing facilities.

Special Projects

- Implementation of corrective measures to manage encroachment (e.g., acquisition of land and relocation of residents), which can affect historic properties;
- Closure of facilities, which can deprive historic properties of Federal protection through transfer to non-federal parties.

Vandalism

- Unauthorized excavation and removal of material from historic properties, aside from being a violation of federal law, can irreparably damage the integrity of the site, result in the loss of irreplaceable information, violate a religious place, or expose and desecrate burials.

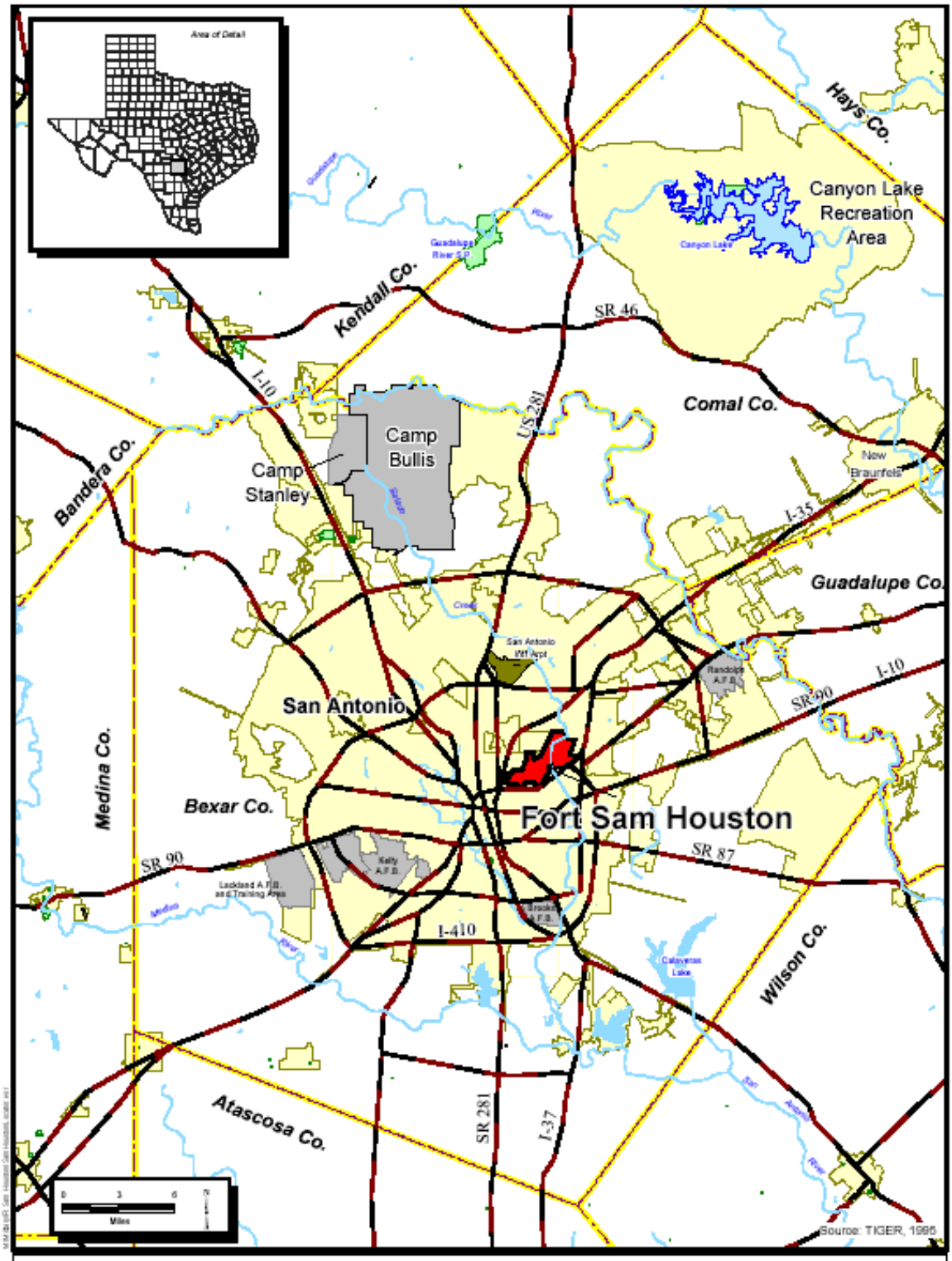


Figure 1-1 -- Fort Sam Houston Locator Map

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2.0 PLANNING LEVEL SURVEY (PLS)

A planning level survey describes the status of completion of the inventory of historic properties (as defined under the NHPA) within the context of the existing physical and historical environments at the installation.

2.1 Installation Physical Environment

FSH is located within the city limits of San Antonio, Texas, 2.5 miles northeast of downtown (Figure 1-1). Camp Bullis occupies a site about 10 miles long (north to south) and 4 miles wide in Bexar and Comal counties, 18 miles northwest of FSH. The area in which Camp Bullis is located was primarily rural until the mid-1900s, but since then has become increasingly urbanized through residential development and expansion. The Canyon Lake Recreation Area (CLRA) is an outdoor recreation area located 48 miles northeast of FSH in the Jacobs Creek area of the Canyon Lake Reservoir (Figure 2-1). Canyon Lake Reservoir is located north-northwest of the town of New Braunfels, along the Guadalupe River. The CLRA is located on land owned by the USACE, and utilized by FSH personnel through a long-term lease agreement. FSH and its sub-installations consist of approximately 31,000 acres distributed among the FSH Military Reservation (3,150 acres), the Camp Bullis Military Reservation (27,994 acres), and the CLRA (110 acres). The regional physiography is governed primarily by the Balcones Escarpment, a broad area of faulted limestone forming the southern and eastern edge of the Edwards

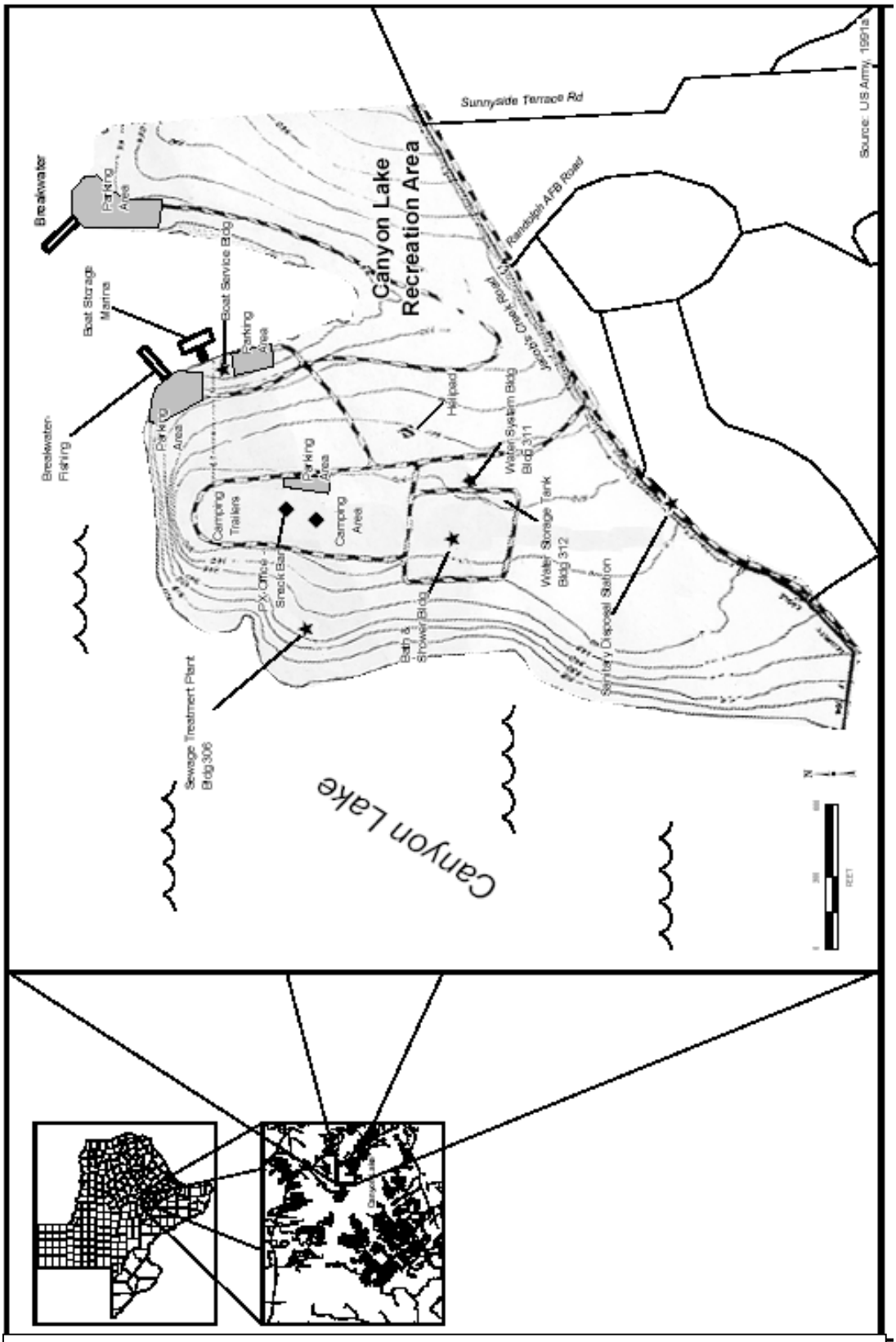

Figure 2-1
Canyon Lake Recreation Area

Plateau. This escarpment rises approximately 1,000 feet above the coastal prairie to the south and east, and has a marked influence on the environmental setting. To the northwest of the escarpment lies the Edwards Plateau, a rugged hilly region dissected by many small streams. It is drained by Cibolo and Balcones Creeks and contains the headwaters of Culebra, Leon, and Salado Creeks (Taylor et al. 1966:119). Elevations in the Plateau range from 1,100 to 1,900 feet. The soil resources in the area of FSH have been studied in detail by the Natural Resources Conservation Servcie (U.S. Department of Agriculture 2002), and they include Houston Black, Tarrant, Frio, Venus, and Lewisville. The western upland portion of the installation consists primarily of the Houston Black series. These soils consist of clayey soils that are deep, dark gray to black, and calcareous. Houston Black soils have variable surface drainage with poor to nonexistent internal drainage. These soils are nearly level to strongly sloping. Runoff can be fairly rapid from the Houston Black soils when they exhibit slopes greater than one percent, and erosion problems can be severe. These soils are fairly productive, and in rural areas they are cultivated for grains and fiber crops. Tarrant soils occur in patches in the western portion of the installation. The soils in the eastern portion of the installation are derived from various stream terrace deposits. The Trinity and Frio soil association occupies the bottomlands and low terraces along Salado Creek. These soils, which form over recently deposited (or Recent) alluvium, are frequently flooded. Venus soils consist of clay loams over older alluvium, and are not subject to stream overflows. Lewisville soils, moderately deep soils formed over the higher terrace deposits, are some of the more productive soils in Bexar County.

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Salado Creek flows from north to south through the eastern portion of FSH. The western part of FSH is drained by a small tributary of the San Antonio River (Alamo Ditch) and no flooding problems have been reported on this section. The southern and central portions of the installation are drained by the City's storm drainage system. The location of the reservation areas on the edge of the Gulf Coastal Plains results in a modified subtropical climate. San Antonio is situated between a semi-arid area to the west and the coastal area of heavy precipitation to the southeast. The average annual rainfall of 27.54 inches is sufficient for the normal production of most crops. Precipitation is fairly well distributed throughout the year, with heaviest amounts during May and September.

At Camp Bullis, the cantonment area, where administrative, support and classroom facilities are located, comprises 603 acres; CB's 23 firing ranges comprise 6,013 acres; and maneuver areas, where the bulk of training activities occur, comprise the remaining 21,421 acres.

From a topographic perspective, CB falls within the Edwards Plateau area along the Balcones Fault Zone of northern Bexar County. The Balcones Fault Zone, located along the eastern and southern boundary of the Edwards Plateau, is defined by undulating and hilly topography that ranges from about 700 to 1,100 feet. Prominent landforms within CB include King Ridge (1,515 ft), Otis Ridge (1,480 ft), and High Hill (1,490 ft). Numerous caves and karst features— located throughout the installation—are the

dominant subterranean features at CB. As of this report, 62 caves and 296 karst features have been documented on the installation. Of those features, 29 are recharge areas for the Edwards Aquifer.

CB lies completely within the Tarrant-Brackett soil association. This soil association consists of gently sloping to very steep, shallow or very shallow, stony soils that are underlain by Glen Rose and Edwards limestones. These soils developed over hard limestone. Runoff is rapid and erosion is a problem. Most of the association (65 percent) is represented by Tarrant soils that have a surface layer composed of very dark grayish-brown, calcareous clay loams with a maximum thickness of 25.4 cm (10 in). This layer is friable when moist and contains limestone fragments that range from .64 to 51 cm (.25–24 in) in diameter. The subsurface layer, a hard, fractured limestone, is about 20.3 cm (8 in) thick, and clay loam occurs in the cracks and spaces. This layer is underlain by hard limestone bedrock. Brackett soils account for about 20 percent of the association. They consist of a 10.2- to 40.6-cm (4- to 16-in) thick, light-colored, highly calcareous clay loam surface layer over soft marl or limestone interbedded with hard limestone. Stones, gravel, and cobblestones are present in this layer. The Tarrant-Brackett Association is not suitable for agriculture, but it is ideal for range. This association is represented in the project area by the Tarrant Association, rolling (5–15 percent slopes)[TaC], Tarrant Association, hilly (15–30 percent slopes)[TaD]; and the Brackett-Tarrant Association, hilly (8–30 percent slopes)[BtE] soils (Peter and Hunt 1992:3).

Six intermittent streams comprise the natural water resources found within CB. Cibolo Creek drainage meanders through the northern-most portion of the installation. It is generally dry. Salado Creek, beginning near the northwestern boundary, flows generally in a south-southeasterly direction across the installation. Lewis Creek drains the central portions of the installation and flows into Salado Creek to the southwest. Meusebach Creek drains the northern portion of the camp and joins with Cibolo Creek approximately two miles northeast of CB. Panther Springs Creek, and its unnamed tributary, drain the southeast portion of CB and join with the Salado south of the camp. All the streams are intermittent and are fed by precipitation.

2.2 Historic Background

In 1845, the U.S. Army established a post at San Antonio that was used as a base for Army operations against Native Americans, and against Mexico in the Mexican War (1846-1848). The U.S. Army Quartermaster Department established a Quartermaster Depot at San Antonio in 1846. This installation functioned as the main depot for the interior of the new state of Texas, and supplied the U.S. military during the Mexican War. However, none of the storehouses, offices, or depot quarters were permanent or owned by the government; all were rented. The Mexican War ended with the Treaty of Guadalupe Hidalgo in 1848. In 1849, San Antonio became the headquarters of the U.S. Army Eighth Military District. Property offered by the city as the headquarters of the Eighth Military District was returned by the government after it was judged inadequate (Freeman 1993b:5-7).

Residents of San Antonio wanted a permanent military installation in the city. Such an installation was desirable not only for the protection it would afford against Native American and Mexican aggression, but also for the economic benefits it would provide for the city. San Antonio tried six times to give land to the government for a permanent military installation before an offer of land for an arsenal was finally accepted by the U.S. in 1852. Construction began on the installation in 1858, but was interrupted by the Civil War, when Confederated forces occupied San Antonio. In 1866, Federal troops returned to the city. San Antonio resumed efforts to obtain a permanent military installation (Freeman 1993b:5-7).

After a competing bid from New Braunfels and fears that the military would chose to locate permanently in Austin rather than San Antonio, the U.S. government expressed interest in establishing an installation on land east of San Antonio. Between 1870 and 1875, the government accepted three donations of land from the city, 92.79 acres in all. The post's Quartermaster Depot, Headquarters of the Department of Texas, Staff Post, Hospital, pumping plant, mess hall, corrals, and stables would be built on this land (Freeman 1993b:6-8).

2.2.1 Fort Sam Houston Main Cantonment

In 1873, appropriations were made for the construction of a permanent Quartermaster Depot in San Antonio, but project funding was discontinued until 1875. Construction of the depot began in 1876, the same year that Company D of the Tenth Infantry was moved from Austin to San Antonio and a post of the U.S. Army was established at San

Antonio. By February 1878, the depot, modeled after the Quartermaster Depot in Jeffersonville, Indiana, was nearly complete. Beginning in 1877, the depot was used to house personnel and supplies, but was not officially "in place" until 1879 (Freeman 1993b:6, 10-15).

The depot accommodated the Quartermaster Department and the Headquarters of the Department of Texas, originally established in 1853 and reestablished after the Civil War in 1865. It quickly became apparent that additional housing was needed at the depot. A building program was initiated that led to the construction of the permanent officers' housing at the present-day Staff Post. Construction of this housing was largely complete 1881. The building program was notable because it occurred at time when housing conditions at Army installations in the U.S. were generally poor and funds for new construction not easily obtained (Freeman 1993b:16, 18, 20, 26).

Beginning in the 1880s, a major change in War Department policy led to further growth of the future Fort Sam Houston, at that time generally referred to as the Post of San

Antonio (Handy 1951:50-51). In 1884, Congress gave in to pressure from the War Department for the consolidation of the military installations scattered across the United States. The War Department expected such consolidation to "make it possible for soldiers to train in large formations, for the Army to maintain fewer, better-constructed buildings, and for military personnel to be available for service wherever needed by taking advantage of a rapidly developing national transportation network" (Freeman 1993b:26). The consolidation took place over more than a decade, lowering the number of garrisoned posts from 117 in 1888 to 96 by 1892. San Antonio, a strategically located city, served by several railroads and with plenty of water and good lines of communication, was chosen as a consolidation point for Army troops (Freeman 1993b:26-28). Expansion of the post as a result of Army consolidation led to economic gains for San Antonio, and reportedly "provided affirmation of the increasing importance of San Antonio as a State-wide trade and transportation center" (Freeman 1993b:48).

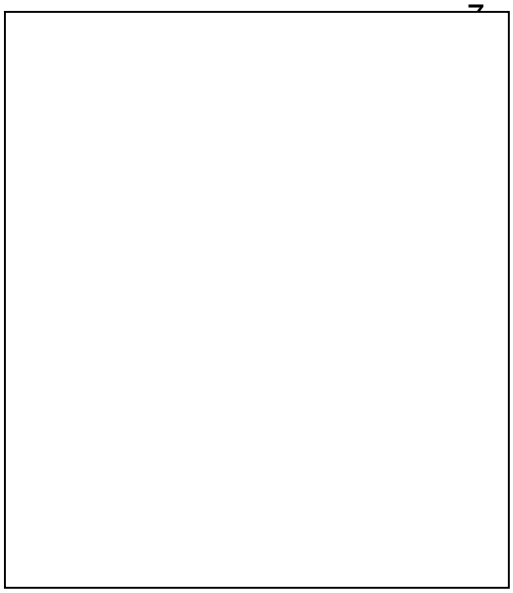

Magazine, Building 2157 (1889)

Acquisition of additional land to expand the Post of San Antonio began even before Congressional approval of the consolidation plan. The first new land was acquired in 1882, and additional acreage was obtained between 1882 and 1883. New personnel moved onto the post before planning and construction of new quarters was accomplished (Freeman 1993b:28-30). Planning and construction of the new post's quarters and associated buildings and structures began around 1883. Construction was

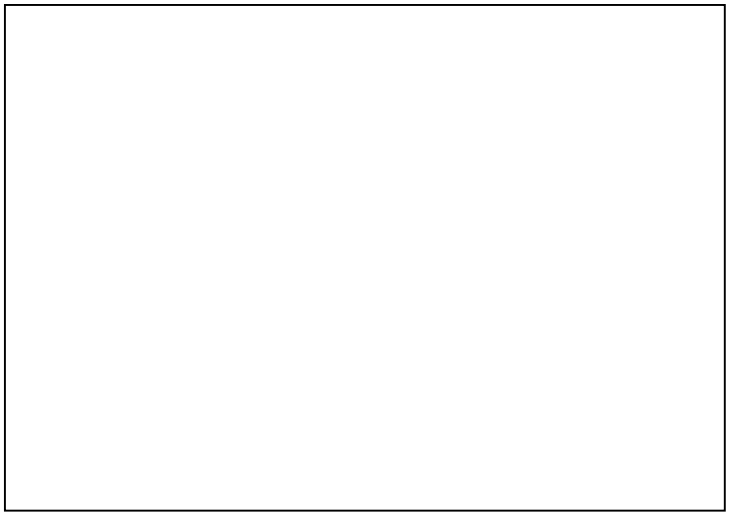
completed bit by bit, as funding became available. The majority of buildings and structures associated with this phase of expansion were complete by 1890, the year the post was named Fort Sam Houston (Freeman 1993b:28-43; Handy 1951:50-51). Additional major building projects coincident with the construction of the quarters included the completion of a two-story brick hospital and a brick magazine. One result of this building program was the expansion of quarters expanded onto what was once the firing range, leading to government acquisition of a 310 acre area to the north of Fort Sam Houston for use as a new rifle range (Freeman 1993b:43).

The years between 1895 and 1913 were eventful ones at Fort Sam Houston. Just before the Spanish American War (1898), the Department of Texas, which had been headquartered at Fort Sam Houston, was replaced by the Fifth Military District, a unit of the Department of the Gulf, headquartered in Atlanta. This change in the organization of the Army led to concern in San Antonio that the city would decline in importance as a military center. San Antonio politicians and citizens lobbied successfully for the reestablishment of the Department of Texas after the war, gaining the return of the Headquarters to Fort Sam Houston in 1899 (Freeman 1993b:50-51; Handy 1951:64-65). Troops were trained and equipped at Fort Sam Houston for the Spanish American War. Among the troops equipped by the Quartermaster Depot during the war were Teddy Roosevelt's Rough Riders, in San Antonio during May 1898 (Handy 1951:63). Between 1901 and 1903, there was a nationwide move to further troop concentration. San Antonio was chosen again as a concentration center. In response to this choice, another phase of construction was undertaken at Fort Sam Houston. The new

construction reflected changes that had taken place in the Army since the last decade of the nineteenth century: building plans had been standardized, new construction methods were being used, civilian contractors were utilized more than previously, and problems with sanitation on Army installations addressed. Sewerage systems were planned and constructed at both Staff Post, Hospital, and Quadrangle by 1901, and new plumbing installed at Infantry Post by 1902 (Freeman 1993b 49, 51-52). Additional land was purchased and buildings planned using standardized (previously used) plans. New construction, which began in 1904 and was completed by 1906, included officers quarters, a parade ground, cavalry barracks, mess halls, kitchens, lavatories, artillery barracks, and a hospital (Freeman 1993b:52-53, 55, 58, 66).



The choice of Fort Sam Houston as one of seven brigade-sized posts in the United States led to a further building phase at the fort. Land for expansion was acquired between 1906 and 1908 north and east of the existing fort. Construction of buildings began around 1906 with the completion of a new hospital. By 1910, new buildings and structures, most of red brick rather than the previously used buff-colored brick, included the new hospital, as well as buildings for two infantry regiments, one cavalry regiment, three field batteries and regimental headquarters, and one signal corps company (Freeman 1993b:67-68, 86). More buildings, including a new bakery, were added to the



plan as construction proceeded. During construction of the Brigade Post, many troops transferred to Fort Sam Houston, including troops from Forts Brown and Ringgold, who participated in the Mexican border conflict in 1909 (Freeman 1993b:81, 83, 86). In March 1911, 1,200 troops, "the largest peacetime assembly of troops that had ever occurred" (Freeman 1993b:86) took place at the fort as troops arrived for maneuvers on the land acquired in 1908, on land leased to the north of the fort, and on the newly acquired Leon Springs Military Reservation. Among the participants were Douglas McArthur and George C. Marshall (Freeman 1993b:49, 86, 90).

In 1909, San Antonio was chosen as the location of the Army's permanent flight station, and by 1910, the Signal Corp's one airplane was housed in a shed "near present-day North New Braunfels Avenue near the site of the cavalry's new mounted drill ground" (Freeman 1993b:82-83). Between 1910 and 1916, construction continued at Fort Sam Houston. A wireless station, railroad spurs, a laundry, pumping plant, water tanks and a trestle were constructed during this period. By 1914, 600 acre Fort Sam Houston had become the largest Army post in the United States. Between 1913 and 1915 the aviation center at Fort Sam Houston was planned and constructed, and soon the First Aero Squadron moved there from Fort Sill, Oklahoma. In 1916, when Francisco

"Pancho" Villa raided a New Mexican town, the First Aero Squadron was dispatched to New Mexico to take part in General Pershing's punitive expedition. Troops assembled and were trained at Fort Sam Houston's Camp Wilson, east of New Braunfels Avenue, in preparation for duty in connection with the Mexican border conflict (Freeman 1993b:90, 92-93). In the area of Camp Wilson the Army also established a motor pool to supply Pershing's Punitive expedition, "the Army's first large-scale use of motor vehicles in transportation" (Freeman 1993b:93).

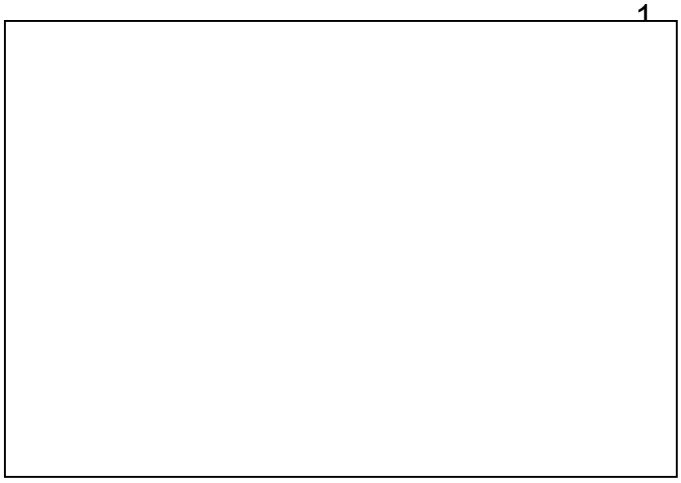
Camp Wilson was used as a demobilization camp after troops were called back to the United States from Mexico in January 1917. Just a few months later, the United States declared war on Germany, and the Army began construction of cantonments and camps to necessary for the conscription and training of an estimated 1.1 million troops. Camp Travis, a National Army Cantonment at Fort Sam Houston, was constructed during this time. It was built between present-day Dodd Field and the Brigade Post. Camp Travis was designed by well-known city planner George E. Kessler, who counted among his achievements the design for the grounds of the 1893 Chicago World's Fair, the city plan of Dallas, park and boulevard plan of Fort Worth, and the boulevard plan for Kansas City. It took approximately 7,000 workers to build the 1,268 standardized buildings constructed before 1917; after 1917, an additional 181 buildings were constructed. Recruits and draftees were processed and organized into


Nurse's Quarters, Building 189 (1918)

units at Camp Travis, and trained at both Camp Travis and Leon Springs Military Reservation. Some permanent construction took place at Fort Sam Houston during World War I, including expansion of the Quartermaster Depot. Additional land was acquired north of Infantry Post, as well (Freeman 1993b:93, 97, 100). In 1918, Fort Sam Houston and Camp Travis functioned as demobilization centers (Freeman 1993b:105).

In order to store the large amounts of supplies returned from the War, the New General Supply Depot was constructed at Fort Sam Houston between 1920 and 1921. It was located west of the Quadrangle and North of Infantry Post, and included railroad tracks, roads, utilities, 38 permanent warehouses, an office building, and a gas station. Quartermaster Depot Headquarters was moved to the New Depot in 1921, the same year that the Southern Department of the Army was replaced by the Eighth Corps Area, which encompassed Texas, Oklahoma, Colorado, New Mexico, and Arizona. Some of the area of the Quadrangle vacated by the Quartermaster Department after its move to the New General Supply Depot was used as office space for Eighth Corps Area personnel. In 1922, Camp Travis became a part of Fort Sam Houston. Between 1922 and 1926, little permanent construction took place at the fort (Freeman 1993b:106).

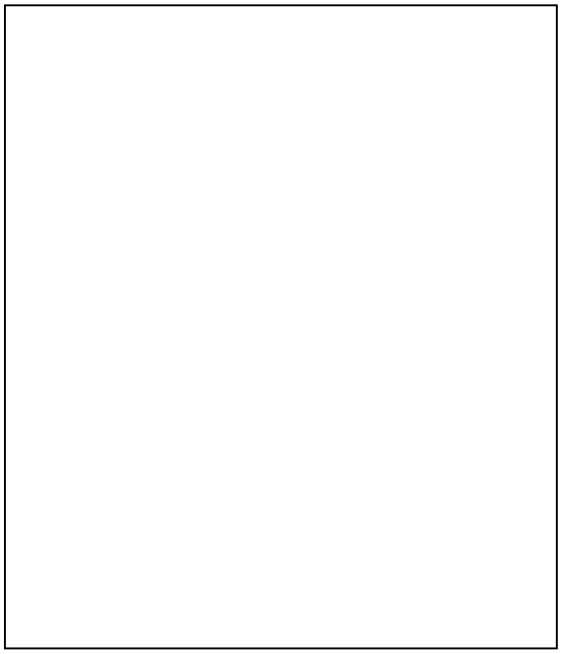
By the mid-1920s, it was clear that many World War I-era temporary buildings in the U.S. were in poor condition and needed to be replaced. A major building phase occurred at the fort after Congress passed appropriations bills introduced in 1926 to pay for the construction of new Army housing. San Antonio architect Atlee B. Ayers



organized a successful local campaign to have the new buildings at Fort Sam Houston built in the Spanish style. An Infantry Regimental Headquarters and an Infantry Battalion Barracks were completed by 1928. Between 1930 and 1931, Field Artillery Barracks were constructed, as were officers' and noncommissioned officers' quarters. In 1932 and 1934 garages associated with the officers' and noncommissioned officers' quarters were completed. All these buildings were constructed in "mission style" (Freeman 1993b:107-108, 111-112, 123).

During the Great Depression in the 1930s, high unemployment rates were experienced in Bexar and El Paso counties; however, workers benefitted from three government programs designed to create jobs: the Public Works Administration (P.W.A.); the Civil Works Administration (C.W.A); and the Works Progress Administration (later Works Projects), or W.P.A. (Freeman 1993b:101-104). Military installations in San Antonio also benefitted from the monies spent on P.W.A., C.W.A., and W.P.A. projects (Freeman 1993b:104). In 1933, For Sam Houston's involvement with public works projects began, when the Fort and Camp Bullis became "1 of 73 conditioning camps in the United States that received, examined, enrolled, and organized approximately 250,000 young men into 200-man units" of the Civilian Conservation Corps (C.C.C.). The C.C.C. was established to provide jobs for the unemployed and to undertake a

program of conservation in the U.S. Later, Fort Sam Houston would benefit from Federal Emergency Administrator of Public Works allotments, as well as from working with the C.W.A., P.W.A., and W.P.A. (Freeman 1993b:120).



In 1931, Fort Sam Houston Cemetery, on land acquired in 1917, was made a part of San Antonio National Cemetery. Improvements to the cemetery were made using P.W.A. labor (Freeman 1993b:119, 123). Construction continued at the fort during the mid-1930s, utilizing public works funds when possible. A radio tower building, a Quartermaster garage for the motor pool, vehicle sheds, a dispatcher's office, post prison, quartermaster warehouse, ordnance shop, and dispensary were built during these years. Construction of officers' housing as well as a bachelor officers' quarters and mess hall, entertainment facilities, post exchange, and a new electrical system was complete by 1935. Between 1935 and World War II, new medical facilities were completed at the fort (Freeman 1993b:123, 127, 130).

During the interwar period, the Second Division was garrisoned at Fort Sam Houston. This Division, made famous by its extensive battle experience during World War I, trained at Fort Sam Houston and at Camp Bullis. At Camp Bullis during the 1930s, this Division participated in testing a new form of combat organization, known as the

Triangular Division, which would become “the basis of all Army combat organization between 1939 and the Korean War” (Freeman 1993b:105). See also *Camp Bullis, A Military Training Facility in the Southern Department and Eight Corps Area, 1906-1946* (Freeman 1993c).


Warehouse, Building 4189 (1941)

World War II brought the necessity for emergency construction at Fort Sam Houston. Over 400 barracks were built in response to the need for troop housing. Other temporary buildings were constructed as well, including fire stations, administrative offices, clinics, shops, theaters, chapels, clubs, induction and processing facilities, and sports facilities. During the War, the Fort Sam Houston’s mission included receiving new personnel; training infantry divisions; training combat, combat support, and combat service support units smaller than divisions; running service schools; operating a prisoner-of-war camp; participating in a WAAC program; and unit tactics and organization (Freeman 1993b:134-135). During the War, the Depot functioned as a procurement center, increasing in importance as the War progressed. First, the depot was made the center of a United States Procurement Zone. Later, the Fort Worth and San Antonio Quartermaster Procurement districts were made into one district and the district’s headquarters established in San Antonio. Wartime medical facilities and programs at Fort Sam Houston also were significant. During the war, Brooke General Hospital operated as an important Army medical center. Medical training of enlisted personnel

and basic training of Army nurses also took place at Fort Sam Houston during World War II (Freeman 1993b:134, 141).

After the war, Fort Sam Houston acted as a separation center. The major mission at the fort after World War II was medical. In 1945, the Medical Field Service School moved from Carlisle, Pennsylvania to Fort Sam Houston. The Institute of Surgical Research, which performed research in the fields of trauma surgery and antibiotic medicine, relocated to Fort Sam Houston in 1946. The Institute of Surgical Research eventually would specialize in the research and treatment of burns (Freeman 1993b:141-142).

The significant medical mission at Fort Sam Houston continued through the Korean War and Vietnam. In 1973, the Army Medical Department was reorganized, and the consolidated command headquartered at Fort Sam Houston. In 1971, when the Fourth and Fifth Armies merged to create the new Fifth Army, one of three armies in the continental United States, the Fifth Army moved into the Quadrangle at the fort. (Figure 2-2)

2.2.2 Camp Bullis

The development of FSH into a major garrison post in 1882 increased the need for an area to provide field training and weapons ranges for the troops stationed there. By 1890, the existing range at FSH proved too small, and efforts were made to find a larger, more rural area. In 1908, the U.S. purchased a 17,000-acre site northwest of

FSH (U.S. Army, 1990). It was originally named the Leon Springs Military Reservation. Military maneuvers began in June 1908. In 1917, a portion of the Leon Springs Military Reservation was designated as Camp Bullis and was made a sub-installation of FSH. Subsequent land acquisitions and transfers have brought Camp Bullis to its current size of 27,994 acres.

After the end of World War II, FSH began to shift its mission toward a medical operations and training emphasis. At Camp Bullis, the changes in infantry weaponry, with its increased ranges, meant that many of those weapons could not be fired safely at Camp Bullis. With this restriction of training activities at Camp Bullis, and the conversion of barracks space to hospital wards at FSH, the Army sought to provide a different role for the facilities at FSH and Camp Bullis in the post-war era.

Mess Halls and Kitchens, Buildings 5116-5120 (1930-1935)

Fort Sam Houston Historic Buildings

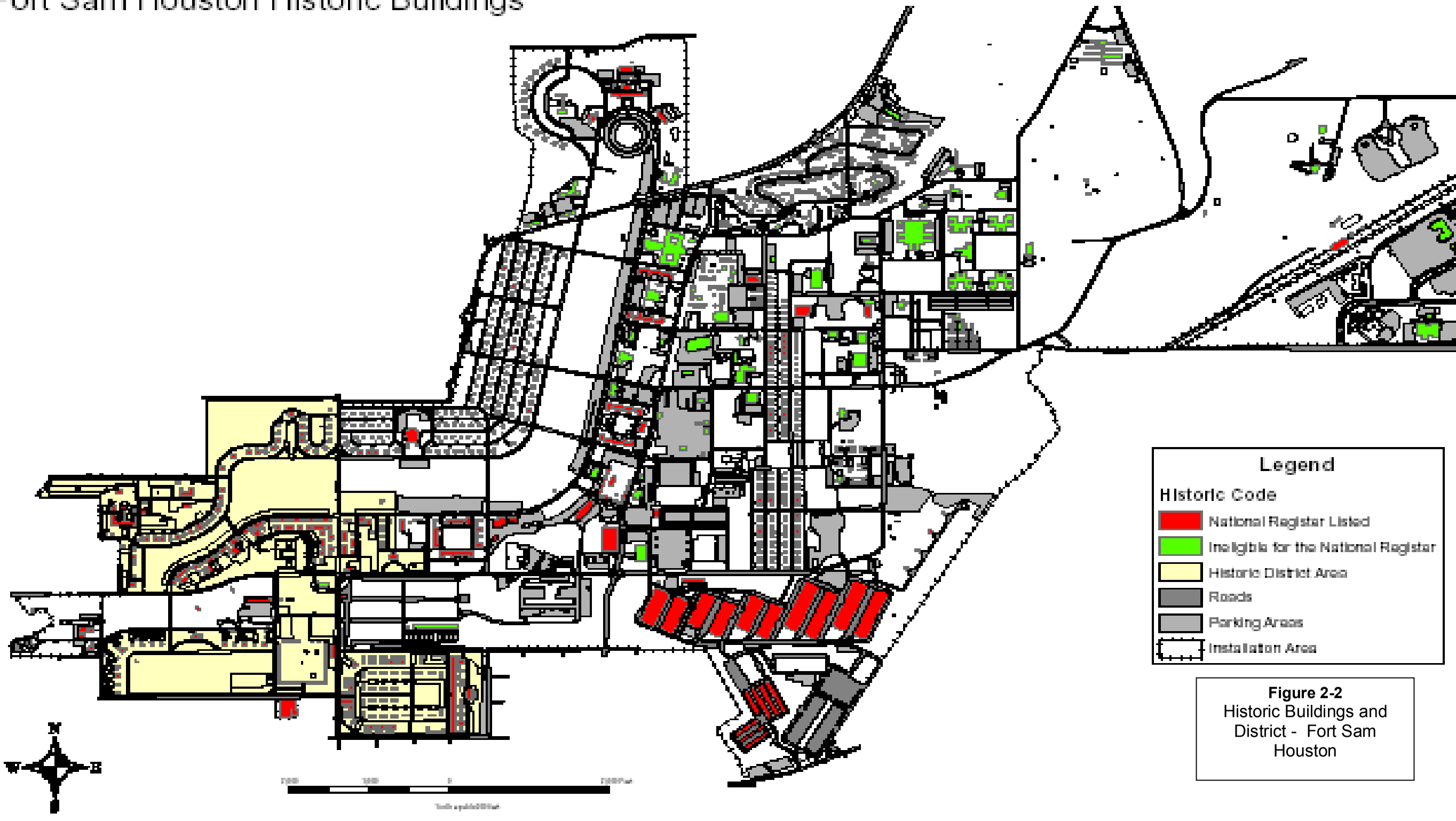


Figure 2-2
Historic Buildings and District - Fort Sam Houston

1

Motor Pool, Building 6104 (1945)

The Medical Field Service School (MFSS) at Carlisle Barracks, Pennsylvania was relocated to FSH in 1945. For Camp Bullis, there was little change to its facilities as the medical organizations became established at FSH. The medical personnel still required the basic field and small arms training, though additional field training sites were created specifically for the practice of field medical skills by the medical personnel.

When North Korea invaded South Korea in June 1950, the training at Camp Bullis and FSH focused on medical personnel from the reactivated Medical Replacement Training Center (MRTC) at FSH, and MFSS at Camp Bullis. Because the use of the firing ranges for artillery fire was eliminated after May 1951, Camp Bullis was able to create an impact area of greatly reduced size and fixed location, opening up the other areas of the camp to other types of training without the dangers of small arms or artillery fire. Medical training continued as the principal activity at Camp Bullis.

With the buildup of U.S. troops in Vietnam from 1964 to 1972, FSH and Camp Bullis increased their training loads significantly. Because of the tremendous training load at the camp, further improvements to the cantonment area were

required, including framed tents, classrooms, and administrative and supply buildings. A confidence course, physical training area, and hand-to-hand combat arena were established nearby. Additional firing ranges were created, and a driving course was set up south of the cantonment area for wheeled, tracked, and later, ambulance-type vehicles. In the mid-1960s, the U.S. Air Force (USAF) began to increase its use of Camp Bullis as a training facility for both basic trainees and security detachments. By 1968, the USAF had its own food service squadron at Camp Bullis to support these activities.

When the Vietnam War came to a close in the early 1970s, activity at Camp Bullis slowed considerably as the U.S. sought to shift a significant portion of its military readiness onto the shoulders of the Reserve Component. Major combat elements were placed in the National Guard, while the combat support and service support forces (with some combat forces) were placed in the Army Reserve. The USAF increased its use of the camp by expanding the Air Base Ground Defense (ABGD) training programs for its Security Police. A School of Applied Aerospace Science was opened by the USAF at Camp Bullis in 1975, and by 1977 the USAF Security Police Training Site was completed in Maneuver Area (MA) 7. The USAF served as the largest user of Camp Bullis until 1987, when the ABGD School was moved to Fort Dix, New Jersey. It returned to Camp Bullis in 1995 and was renamed the Ground Combat School (GCS). In order to accommodate training requirements of Air National Guard (ANG) units, a Combat Assault Landing Strip (CALS) was constructed in the northeast corner of the

installation in 1982. Following an environmental impact assessment (EIA) to address local developers' concerns regarding the extent of the operations planned on the new airstrip, the CALS was certified for use in 1986.

From 1990 to the present, Camp Bullis has remained an important installation, providing target ranges and field training areas for the U.S. Army, USAF, U.S. Marine Corps (USMC), and Reserve Component elements in the San Antonio area, as well as serving as an exercise site for many out-of-region military units. As of 1990, the camp was accommodating more than 650,000 man-days of training, with the Academy of Health Sciences (AHS) and the Reserve Component the most frequent users. The AHS was already planning several new training parks to further the training of its medical personnel and provide support facilities.

Camp Bullis has also experienced increased use by organizations outside the military. The camp is used by various police and law enforcement agencies, including the Federal Bureau of Investigation (FBI) and the U.S. Marshals; the Boy Scouts and Girl Scouts regularly use the area; 21,000 acres are used for hunting during the state-designated hunting seasons; and until 1992, nearly 18,000 acres were under agricultural grazing leases. In addition, it is managed as a habitat for numerous wildlife species including five endangered species (the black-capped vireo and the golden-cheeked warbler, two Rhadine beetle and one meshweaver species).

2.2.3 Canyon Lake Recreation Area

The CLRA lease area is 110 acres and is located approximately 48 miles northeast of FSH, between IH-35 and US-281. Canyon Lake was originally constructed as a flood control and conservation project, but additional development in the area has provided recreation for both military and civilian area residents. The CLRA is owned and managed by the U.S. Army Corps of Engineers (USACE), and FSH holds a 50-year permit, issued by the USACE in 1965, to use the 110-acre recreational area for the benefit of area military personnel. As a permittee, FSH is responsible for maintaining its facilities and complying with any state or Federal regulations governing water quality or hazardous substances (Povanka,1999). However, the USACE is responsible for the overall management of Canyon Lake Reservoir and its primary function as a flood control facility.

The majority of development is clustered along a ridge line in the western portion of the site. The majority of the camping facilities used by both trailer campers and tent campers are located within a circular drive that allows access to the entire ridge area. A picnic area is located in the northeast portion of the ridge. To the east of the picnic area is a small inlet where water-dependent recreation activities and facilities are located, including a landing dock, marina, breakwater, beaches, and swimming area. A sewage treatment plant is located on the west side of the ridge and is accessed by a small circular drive. An area just east of the camping area and northeast of the water plant has been cleared to provide helicopter access to the facility. A water plant is located just below the heliport area. The land surrounding the CLRA is owned by the USACE, and because lakeshore land is controlled by the

USACE, only intermittent pockets of recreational and flood management facilities interrupt the natural shoreline. The property to the south of the CLRA is leased by the Air Force and also provides picnic and camping areas for military personnel. The area beyond the USACE property is mostly rural, undeveloped land. Higher density vacation communities, both old and new, are interspersed in the undulating landscape of the surrounding Texas “hill country” (U.S. Army, 2000a).

The CLRA is used primarily in the summer months, particularly on the weekends and holidays. During these times, trailer occupancy rates have been as high as 95 to 100 percent. The average trailer occupancy rate during the peak summer period ranged from 72 to 79 percent over the last 5 years, while the annual average trailer occupancy rate was between 46 and 48 percent. It should be noted that trailer occupancy represents approximately 27 percent of the total recreation area usage. Rental and private boats represent approximately 14 percent of the CLRA use, recreational vehicles are 8 percent, tents are 3 percent, beach use is 12 percent, picnicking is 33 percent, and information is 3 percent (USACE, 1996). The current staff at the CLRA is 14.

2.3 Comprehensive Overview of past installation inventories

As the Army’s ninth oldest installation, Fort Sam Houston has been the subject of much study, including the following inventories of its historic properties.

Archeological Inventories

1974	Hester, T.R. *41BX194: A Terrace Site, Fort Sam Houston, TX*	Center for Archaeological Research, University of Texas, San Antonio.
1978	Gerstle, A., T. C. Kelley, and C. Assad *The Fort Sam Houston Project: An Archaeological and Historical Assessment.* Archaeological Survey Report Number 40.	Center for Archaeological Research, University of Texas, San Antonio.
1982	Gibson, E.C., C.J. Jones, and D.A. Knepper. *Archaeological Investigations of Area Slated for Expansion at Fort Sam Houston National Cemetery, San Antonio, Texas.*	Center for Archaeological Research, University of Texas, San Antonio.
1987	Gilmore, K. K. and L. Allen. *Cultural Resource Testing of the Criminal Investigation Center Construction Site, Fort Sam Houston, San Antonio, Texas.*	Institute of Applied Sciences, North Texas State University
1988	Gilmore, K.K. and L. Allen. *Cultural Resources Survey in Connection with the Site of the Proposed Brooke Army Medical Center, Fort Sam Houston, Texas.*	Institute of Applied Sciences, North Texas State University
1988	Jackson, J. M., and E.R. Prewitt. *A Cultural Resources Assessment of the Proposed Site of New Construction for the Brooke Army Medical Center at Fort Sam Houston, Bexar County, Texas.*	Prewitt and Associated, Inc.
1988	Quigg, J. M. *Cultural Resources Reconnaissance in Secondary Impact Areas Along Salado Creek at Brooke Army Medical Center, Fort Sam Houston and Camp Bullis, Bexar County, Texas.* Technical Reports Number 5.	Prewitt and Associates, Inc.
1990	Boyd, D. K., I. W. Cox, and H. G. Uecker *Archeological and Historic Investigations at Camp Bullis, Bexar and Comal Counties, Texas: The 1989 Season*. Report of Investigations Number 75.	Prewitt and Associates, Inc.
1992	Howard, M.A. *Prehistoric Research Context for Camp Bullis and Fort Sam Houston, Bexar and Comal Counties, Texas*	
1996	Beene, D. L., and J. L. Buysse *Cultural Resources Survey and Reevaluation of Resources Along the Proposed Perimeter Fence Line at Camp Bullis, Bexar and Comal Counties, Texas*.	Geo-Marine, Inc.
1996	Kibler, K. W., and K. M. Gardner *Archeological Survey and National Register Testing at 41BX377, Camp Bullis Military Reservation, Bexar and Comal Counties, Texas*.	Prewitt and Associates, Inc.
1997	Quigg, J.M. and J.T. Abbott. *Results of Archeological and Geomorphological Investigations at Pershing Field, Fort Sam Houston*	TRC Mariah Associates, Inc.
1998	Maslyk, P., and K. W. Kibler *A Cultural Resources Survey of Camp Bullis, Bexar County, Texas: the 1996 Season.*	Prewitt and Associates, Inc.

1999a	Maslyk, P. *A Cultural Resources Survey of Water Reuse Pipeline Corridor, Fort Sam Houston, Bexar County, Texas.* Letter Report No. 438	Prewitt and Associates, Inc.
1999b	Maslyk, P. *An Archeological Survey of 400 Acres at Camp Bullis Military Reservation, Bexar County, Texas*.	Prewitt and Associates, Inc.
1999a	Scott, A. M. *Archeological Survey of 63 Acres at the 90th ARCOM Rock Crusher Site, Camp Bullis Military Reservation, Bexar County, Texas.*	Prewitt and Associates, Inc.
1999b	*Archeological Survey of 125 Acres at Camp Bullis Military Reservation, Bexar County, Texas.*	Prewitt and Associates, Inc.
1999c	*Cultural Resources Survey of 1,925 Acres at Camp Bullis Military Reservation, Bexar County, Texas.*	Prewitt and Associates, Inc.
2000	Cestaro, G. C., A. M. Scott, and K. W. Kibler *Cultural Resources Survey of 2,302 Acres at Camp Bullis Military Reservation, Bexar County, Texas*. Reports of Investigations Number 125.	Prewitt and Associates, Inc.
2000	Kibler, K. W., and A. Scott *Archaic Hunters and Gatherers of the Balcones Canyonlands: Data Recovery at the Cibolo Crossing Site (41BX377), Camp Bullis Military Reservation, Bexar County, Texas*. Reports of Investigations Number 126.	Prewitt and Associates, Inc.
2000	Scott, A.M. *Cultural Resources Survey of 280 Acres Along Salado Creek, Fort Sam Houston Military Reservation, Bexar County, Texas* [Draft].	Prewitt and Associates, Inc
2001	Cestaro, G. C., M. D. Freeman, M. E. Blake, and A. M. Scott *Cultural Resources Survey of Selected Maneuver Areas at Camp Bullis, Bexar and Comal Counties, Texas: The Archeology and History of 3,255 Acres Along Cibolo Creek*. Reports of Investigations Number 129 (Review draft).	Prewitt and Associates, Inc.

Architectural Inventories

1980	Tompkins, S. *HABS Survey.*	NAER
1986	Mariani & Associates *Study/Survey of Historically Significant Army Family Housing Quarters. Installation Report: Fort Sam Houston, San Antonio, Texas.*	Mariani & Associates Architects

1989	Mariani & Associates *Department of the Army Historic Family Housing Report: Study/Survey of 2,009 Dwelling Units Located at 34 Army Installations.*	Mariani & Associates Architects
1991a	Komatsu/Rangel, Inc. *Existing Conditions Survey from Fort Sam Houston and Camp Bullis Preparation of Cultural Resource Management +B81 Plan and Research Design Outline.*	Komatsu/Rangel, Inc.
1991b	Komatsu/Rangel, Inc. *Existing Conditions Survey: For Fort Sam Houston and Camp Bullis.* KR/I Project Number 9120D. Produced for the U.S. Army Corps of Engineers, Fort Worth District.	Komatsu/Rangel, Inc.
1993	Freeman, M.D. *Fort Sam Houston, An American Depot, Headquarters, and Training Facility, 1876-1976.*	Komatsu/Rangel, Inc.
1996	Austin, S., and D. Peter *Camp Bullis Military Reservation Cultural Resources Management Plan, Appendix I.*	Geo-Marine, Inc.
1997	Austin, S. *Fort Sam Houston Military Reservation Cultural Resources Management Plan, Appendix J.*	Geo-Marine, Inc.

Cultural Resources Management Plans

1996	Austin, S., and D. Peter *Camp Bullis Military Reservation Cultural Resources Management Plan.*	Geo-Marine, Inc.
1997	Austin, S. *Fort Sam Houston Military Reservation Cultural Resources Management Plan.*	Geo-Marine, Inc.
2001a	Peter, D.E., V.G. Clow, and E.G. Salo *Fort Sam Houston Military Reservation Integrated Cultural Resources Management Plan.* Produced for the U.S. Army Corps of Engineers, Fort Worth District.	Geo-Marine, Inc.
2001b	Peter, D.E., V.G. Clow, and E.G. Salo *Camp Bullis Training Site, Integrated Cultural Resources Management Plan.* . Produced for the U.S. Army Corps of Engineers, Fort Worth District.	Geo-Marine, Inc.

Landscape Inventories/Studies

1996	Batzali and Siewers *Historic Landscape Inventory Fort Sam Houston, Texas* [Draft].	U.S. Army Corps of Engineers
1996	Austin, S., and D. Peter *Camp Bullis Military Reservation Cultural Resources Management Plan.*	Geo-Marine, Inc.

1998	University of Illinois at Urbana/Champaign, Department of Landscape Architecture *A Historic Landscape Master Plan for Sam Houston, Texas.*	U.S. Army Construction Engineering Research Laboratories
1998	*Non-historic Landscape Master Plan.*	U.S. Army Construction Engineering Research Laboratories
1998	*Camp Bullis Landscape Master Plan.*	U.S. Army Construction Engineering Research Laboratories

Cultural Affiliation Study

2000	Gardner, Gadus, and Kibler *Cultural Affiliation Overview for Fort Sam Houston and Camp BullisTraining Site, Bexar and Comal Counties, Texas.*	Prewitt and Associates, Inc.

2.4 List of all known historic properties in inventory with assessment of current and desired future condition

2.4.1Fort Sam Houston

FSH exhibits a number of architectural properties that reflect the entire history of its development from the 1880s to the present. Development of FSH from the 1880s to the 1920s is best represented in the following areas:

- Staff Post,
- Infantry Post, and
- Cavalry and Light Artillery Post.

The New Post area represents the expansion of FSH housing facilities during the 1930s.

The total number of buildings and structures currently listed in the facility's database is 1,377. Of the 1,377 buildings and structures identified, 751 are listed

on or considered eligible for inclusion in the National Register of Historic Places (NRHP); the remaining 626 are currently considered not eligible as they have been determined not eligible or do not meet the 50-year criteria for NRHP eligibility (see Appendix A). As these properties approach the threshold for NRHP eligibility, they will be evaluated in accordance with the procedures set forth in SOP 3. The majority of the eligible properties are located in the National Historic Landmark District (NHLD).

Architectural Properties Listed in the National Register of Historic Properties (NRHP)

The National Historic Landmark District (NHLD) at FSH, as defined in 1975 and expanded in 2002, includes the majority of the buildings that comprise the areas known as Staff Post, Infantry Post, Cavalry and Light Artillery Post and the New Post. Six-hundred sixty-nine (669) buildings and twenty-one (21) structures are contributing elements of the NHLD. By definition, all of these properties are listed on the National Register of Historic Places. Five buildings in the NHLD are individually listed on the NRHP:

- Quadrangle (Building 16),
- Clock Tower (Building 40),
- Pershing House (Quarters 6)
- Gift Chapel (Building 2200)
- Old Brooke Army Medical Center (Building 1000)

Architectural Properties Eligible for Listing in the NRHP

There are an additional sixty-one (61) properties that are considered as eligible for the National Register of historic places outside of the NHLD.

Historic Landscape Features

The 1996 report *Historic Landscape Inventory at Fort Sam Houston* identified four distinct landscape areas: the Quadrangle and Staff Post, Infantry Post, Cavalry and Light Artillery Post, and New Post which encompasses the former Camps Wilson and Travis. The 1997 CRMP identified a number of additional historic landscapes. Thirteen of the 14 landscapes identified in the 1997 CRMP were considered eligible for inclusion in the NRHP (Table2-1). None of the historic landscapes has been formally nominated for inclusion in the NRHP.

Table 2-1
Historic Landscape Features

Landscape Component	Eligibility	Date Constructed
Quadrangle	Eligible	**1876 - 1946**
Staff Post	Eligible	1881 - 1946
Infantry Post	Not Eligible	1885 - 1946
Cavalry/Artillery Post	Eligible	1906 - 1946
Channel Pastures	Eligible	1875 - 1946
New Post	Eligible	1926 - 1946
Gorgas Circle	Eligible	1930s - 1946
Depot	Eligible	1917 - 1946
NCO Housing	Eligible	1930s - 1946
Golf Course	Eligible	1930s - 1946
National Cemetery	Eligible	1931 - 1946

NCO – noncommissioned officer

Miscellaneous landscape components were also identified in the 1997 CRMP.

- New Deal-funded work projects from the 1930s are located throughout the post and were determined potentially eligible for listing by the contractor,

though these preliminary determinations have not been formally made in consultation with the TX SHPO. The features are representative of public works projects conducted in the 1930s and display outstanding local craftsmanship.

- The small park, located at the southeast corner of Wilson Road and North New Braunfels Avenue, was constructed during World War II and features include decorative tilework, cast concrete benches, a fountain, and concrete light poles textured to look like wood. The park was determined potentially eligible for listing by the contractor, though this determination has not been formally made in consultation with the TX SHPO.

FSH's ornamental and distinctive entrance gates, which occur throughout the post and include limestone pylons, ornate lamps, and arching ironwork spanning between the pylons, were determined potentially eligible for listing by the contractor, though this determination has not been formally made in consultation with the TX SHPO.

Archeological Resources

The archeological inventory of the undisturbed lands within FSH has resulted in the recording of 12 archeological sites (41BX194, 41BX389, 41BX422, 41BX778, 41BX779, 41BX780, 41BX880, 41BX1209, 41BX1405, 41BX1406, 41BX1407, and 41BX1408). All 12 of the sites have been determined ineligible through consultation with the State Historic Preservation Officer.

Archeological Sites Listed in the NRHP

No archeological sites at FSH have been formally nominated for inclusion in the NRHP.

Potential for Additional Prehistoric Archeological Sites

The potential for additional prehistoric archeological sites at FSH is low. However, recent studies (Scott 2000:10-11) indicate that two floodplain areas along Salado Creek appear to be most promising for containing intact Holocene deposits with the potential for buried cultural materials. Although sites 41BX1209 and 41BX1407 are both located within one of these narrow (<100 m) strips along Salado Creek both were determined ineligible for the National Register of Historic Places; however, there is a potential for other more deeply buried deposits within the areas defined by Scott (2000:12).

- Site detection within such floodplain deposits will require systematic backhoe trenching and limited controlled excavation units.
- Appropriate methodologies for initial determination of eligibility and, if warranted, data recovery for mitigation should include backhoe trenching and controlled excavation units, geoarcheological evaluation, and large-scale horizontal excavations.

Uninvestigated Localities of Possible Historic Archeological Sites

There is a probability for the presence of historic archeological sites within the reservation boundaries. Documentation indicates numerous military buildings

and structures associated with the development of the post have since been removed or demolished. Many of these structures were associated with the early portions of the facility near the Quadrangle and the Staff, Cavalry, and Infantry posts. Documentation also indicates that a number of heretofore unrecorded farmsteads were located in the FSH area prior to the development of the facility.

- Military sites may include any site that is the result of military activities, including but not limited to barracks and encampments for troops, officers' quarters, and specific-use buildings such as stables, bakeries, and latrines.
- Farmsteads are characterized by the presence of occupational refuse (e.g., china, pottery, bottle glass), architectural remains (brick, window glass, nails), and the possible presence of features such as walls, cisterns, and root cellars (often represented by a regularly shaped depression in the ground).
- Also included within the farmstead class of historic sites are various types of outbuildings and some refuse areas. Archeologically, the sites of outbuildings are represented by an artifact scatter that is distinctive from that of the house site. At the former, one finds artifacts related to the specific activity of the outbuilding (for example, machinery parts and harness equipment would be associated with a barn/shop area). Remnants of pens and foundations are often present at such sites. Refuse areas are usually removed from the house site and represent the localized accumulation of objects which may represent the dumping of

refuse from several years of occupation or from numerous sources of refuse.

Properties of Traditional Religious and Cultural Importance to Federally-recognized Indian Tribes

No studies on properties of traditional religious and cultural importance to Federally-recognized Indian Tribes have been undertaken FSH.

Requirements for Future Inventory and Evaluation of Properties

In addition to the studies that have already been conducted, several additional requirements have been identified for further study:

- Historic Gate inventory and evaluation
- Inventory and evaluation of Cold War properties (1946-1958)
- Historic Context for Cold War-era properties on Fort Sam Houston (specifically 1946 through 1973, the end of the Vietnam era)
- Identification of Properties of Traditional Religious and Cultural Importance to Federally-recognized Indian Tribes

2.4.2 Camp Bullis

Architectural Resources

Architectural inventories of CB were initiated in the late 1980s (Komatsu/ Rangel, Inc., 1991). An architectural inventory was summarized in the CRMP produced in 1996 (Austin and Peter 1996); however, both new construction and demolition

have affected the inventory list since then. The total number of buildings and structures currently listed in the facility's database is 364. These resources include buildings, hutments, infrastructure (e.g., wells, roads, culverts, etc.), and structures. Of these resources, 89 buildings or structures and 37 landscape features were built before 1955. The remainder will not have met the 50-year mark used by the National Register until well after 2005. Of the 364 buildings and structures identified, 81 are identified as being potentially eligible for inclusion in the NRHP; the remainder have been identified as not eligible in the initial study; these determinations have not been formally made in coordination with the TX SHPO (see Appendix B). Most of the eligible properties are located in the cantonment area.

Historic Landscape Features

The development of the historic context for CB (Freeman 1993a) and the architectural inventory conducted as a part of the CRMP studies in 1996 resulted in the recognition of 32 landscape features and infrastructure that were integral to the development of the cantonment area and adjacent ranges during the 1930s. It should be noted that none of the historic landscapes has been formally nominated for inclusion in the NRHP.

Archeological Sites

Although 96.7 percent of the unimpacted lands (23,032 ac) within the military reservation boundaries have been inventoried, approximately 5,604 acres are in

need of re-inventory according to presently accepted practices. Archeological studies have resulted in the identification of 287 archeological sites. The total number of sites (prehistoric, historic, or multi-component) currently considered eligible or potentially eligible for the National Register of Historic Places is 35. Thirty-one sites are of unknown eligibility and the remaining 221 sites are not eligible. As noted in Appendix B, some of the archeological sites are presently being reassessed.

Potential Prehistoric and Historic Archeological Properties

Based on the previous inventories and research at CB, it is possible that archeological sites remain to be located or relocated and, if warranted, entered into the state site inventory at the Texas Archeological Research Laboratory (TARL). Once this initial recording is completed, the sites then should be evaluated for NRHP eligibility. The method of eligibility determination will vary from site location to site location, depending on the general contextual setting of any given site, and will be performed in accordance with SOP 3: Identifying and Evaluating Historic Properties.

Potential for Unmarked Graves and Cemeteries

It is possible that unmarked cemeteries or individual graves may be found in the future. In the event that human remains are encountered during construction or future archeological investigations, NAGPRA, NEPA, and NHPA regulations may all apply (see ICRMP, 2001).

Properties of Traditional Religious and Cultural Importance to Federally-recognized Indian Tribes

There have been no studies on properties of Traditional religious and cultural importance to Federally-recognized Indian Tribes undertaken at Camp Bullis

2.4.3 Canyon Lake Recreation Area

Architectural Resources

No sites of NRHP significance are known to exist in the entire Canyon Lake area. However, the area may have been part of one of the small German farms believed to have been in operation in the mid-1850s. Some rock fences left by the German farmers still stand near Canyon Lake, but they are not in the FSH lease area (USACE, 1996).

Prehistoric and Historic Archeological Resources

In 1949, prior to impoundment of Canyon Lake, archeological inventories were performed in the proposed lake area. Twenty sites were examined and three were recommended for further study. Recovered artifacts revealed intermittent occupation attributed to the Archaic Edwards Plateau Aspect and, to a lesser extent, the Central Texas Aspect. No important paleontological assemblages are known to be in the CLRA area (USACE, 1996).

A complete list of all historic properties is provided in Appendices A and B.

2.5 Locations previously inventoried where no historic properties have been identified

Information on areas that have been inventoried without identification of historic properties is contained in the above sections on the historic properties inventories at Fort Sam Houston and Camp Bullis, and in Appendices A and B. More specific information regarding the location of archeological sites has been excluded from this report for sensitivity reasons. The 1996 CRMP for Camp Bullis contains more detailed maps locating areas which have been inventoried and locations where archeological sites occur.

2.6 Historic Contexts

Historic contexts are defined in *National Register Bulleting 15: How to Apply the National Register Criteria for Evaluation* as "the patterns, themes or trends in history by which a specific occurrence, property or site is understood and its meaning (and ultimately its significance) within prehistory or history is made clear." In most instances, if research contexts are well defined, it is possible to identify those sites that have National Register significance at the time of discovery, rather than wait for a formal evaluation to assess significance. The significance of military landscapes must be evaluated in the context of the broader national and military history associated with their development.

Below are the Historic Contexts associated with Fort Sam Houston.

Historic Context

n.d.	Manguso, J.M. *Historic Dodd Field*	Fort Sam Houston Museum
n.d.	Manguso, J.M. *A Pocket Guide to Historic Fort Sam Houston.*	Fort Sam Houston Museum

n.d.	Manguso, J.M. *Pocket Guide to the Cavalry and Light Artillery Post, Fort Sam Houston*	Fort Sam Houston Museum
n.d.	Manguso, J.M. *Pocket Guide to the Infantry Post, Fort Sam Houston.*	Fort Sam Houston Museum
1936	Orchard *The History of the Development of Fort Sam Houston.* Masters Thesis.	The University of Texas, Austin
1945	Conner, J.E. *The Centennial Record of San Antonio Service Forces Depot, San Antonio, Texas. 1845-1945.*	U.S. Army
1951	Handy, M.O. *History of Fort Sam Houston,*	Naylor Company
1985	Cagle, Jr. E. *Quadrangle: The History of Fort Sam Houston.*	Eakin Press
1989	Peter, D.E. and M.D. Freeman *Methodology and Results of On-Site Archival Research at Fort Sam Houston, Bexar County, Texas.*	Geo-Marine, Inc.
1991a	Manguso, J. M. *Camp Bullis: Admirably Suited to All Purposes of Military Training*. Fort Sam Houston Museum, Fort Sam Houston.	Fort Sam Houston Museum
1991b	Manguso, J.M. *Field Guide to the Historic Homes at Fort Sam Houston.*	Fort Sam Houston Museum
1991c	Manguso, J.M. A Pocket Guide to the Staff Post, Fort Sam Houston.	Fort Sam Houston Museum
1991d	Manguso, J.M. Camp Travis: The National Army Cantonment at Fort Sam Houston.	Fort Sam Houston Museum
1993	Manguso, J.M Dodd Field: Target Range, Airfield, Remount Station, and more.	Fort Sam Houston Museum
1993a	Freeman, M. D. *Camp Bullis: A Military Training Facility in the Southern Department and Eighth Corps Area, 1906-1946.*	Komatsu/Rangel, Inc.
1993b	Freeman, M.D. *Agriculture in Texas: Ranching and Stock farming on the Eastern Edwards Plateau, 1845-1941.*	Komatsu/Rangel, Inc.
1994	Freeman, M.D. *Fort Sam Houston, An American Depot, Headquarters, and Training Facility, 1876-1976.*	Komatsu/Rangel, Inc.
1994	Manguso, J.M. *A Little More Distinctive: The New Post Fort Sam Houston.*	Fort Sam Houston Museum

In addition to these specific historic contexts on Fort Sam Houston and Camp Bullis, there are a number of Army-wide contexts that apply to the resources at FSH and CB. These contexts are available on the U.S. Army Environmental Web Site https://aec.army.mil.

Army Ammunition and Explosives Storage in the United States, 1775-1945

"For Want of a Home..." A Historic Context for Wherry and Capehart Military Family Housing

Historic Context for Department of Defense World War II Permanent Construction

Identification and Evaluation of U.S. Army Cold War Era Military-Industrial Historical Properties

National Historic Context for Department of Defense Installations, 1790 - 1940

2.7 Annual Inventory Schedule

While the majority of building resources have been inventoried at FSH and Camp Bullis, and 96.7 percent of un-impacted (outside of ranges) lands (23,032 ac) within the military reservation boundaries of Camp Bullis have been inventoried, there is a continuing need to update the inventories as properties reach the 50-year mark and when faults are found in earlier inventories. Fort Sam Houston will institute a yearly inventory and evaluation to identify and evaluate properties as they turn 50-years old. Camp Bullis will continue to re-inventory the identified 5,604 acres identified for an update. The focus of inventory efforts should reflect the areas scheduled for undertakings, and those properties previously identified as requiring evaluation (Section 3.2), including historic gates and Cold War era properties (1946-1958).

2.8 Consulting Parties and Members of the Public

These entities are directly involved with historic properties management at Fort Sam Houston:

- Texas State Historic Preservation Officer
- Advisory Council on Historic Preservation
- National Park Service (for issues relating to NHL District)
- Mescalero Apache Tribe
- Wichita and Affiliated Tribes
- Tonkawa Tribe
- Comanche Tribe
- Society for the Preservation of Historic Fort Sam Houston
- San Antonio Conservation Society
- City of San Antonio

3.0 CATEGORIZED UNDERTAKINGS

3.1 Summary of Undertaking Categories

A summary of the categories of undertakings that Fort Sam Houston anticipates conducting over the five-year planning period of this document is provided below. The categories refer to classes of undertaking activities and not to specific or individual undertakings or projects.

3.1.1 Maintenance and Repair

Activities typically include building cleaning, repointing mortar joints, paint removal, re-painting, masonry repairs, structural repairs, roof repair, window repair, and maintenance/repair of HVAC, plumbing and electrical systems. The plans to repair and maintain the facilities on FSH are prioritized and documented in the Directorate of Public Works, *Project Priority List.* Though the list is constantly changing, examples of these types of projects can be found in Section 3.2: Past and Proposed Undertakings. These projects are generally under $500,000 in cost, and are funded through Operations & Maintenance (O&M) funds.

3.1.2 Rehabilitation

Defined as the process of returning a property to a state of utility, through repair or alteration, which makes possible an efficient contemporary use while preserving those portions and features of the property that are significant to its

historic, architectural, and cultural values. Preferred Actions for investment priorities at FSH include maximizing the reuse/rehabilitation of underutilized facitilies, especially for general purpose administrative buildings, unaccompanied personnel housing (UPH), and family housing. Rehabilitation priorities are for the 2200 Area of UPH, the Patch- Cafee Housing area, the Graham, Wheaton, Dickman, Gorgas Circle area, the Artillery Post, and the Infantry Post. Rehabilitation may also include security-upgrade measures.

3.1.3 Privatization/outleasing/excess process

Defined as the process of finding new uses for real estate assets that are currently not needed to support Fort Sam Houston's mission. This may include privatization (through Residential Communities Initiative or others), outleasing (long-term lease of properties), or excess (sale). Fort Sam Houston is scheduled to undergo housing privatization through the Residential Communities Initiative in FY 03 for 935 housing units. More information on the RCI program can be found at http://www.rci.army.mil.

3.1.4 Mothballing/Layaway

Defined as the process of preparing a building not currently needed to support Fort Sam Houston's mission for a scheduled time-period of disuse, with the plan for future use once the mission changes or a new use is found.

3.1.5 Demolition

Defined as the process of removing a building's physical structure that is no longer needed to support the mission at Fort Sam Houston, or has become a hazard. FSH maintains a *Buildings Considered for Demolition/Reuse List*, which contains the information regarding vacant facilities located on FSH, Camp Bullis, and the CLRA that are candidates for demolition or reuse. Buildings considered for the facilities reduction program through FY 06 are describe in Section 3.2.

3.1.6 Utilities privatization

This includes a plan to privatize 100 percent of all utilities by September 30, 2003 through the transfer of installation utility infrastructure to a private/public sector organization that takes over the responsibility to own, maintain, repair, and eventually dispose of and replaces the systems to meet current and future requirements.

3.1.7 New Construction

To enhance training facilities and provide quality housing and workspace for soldiers and civilians, there are plans for new construction to be carried out in accordance with the land use (Figure 3-1) and long-range plans. . Major construction projects (over $1 million in value) must be approved at the installation, Major Command, and HQ Army level. They compete for funding with all other proposed Army projects, and funding is through congressional appropriation. A list of proposed construction projects is located in Section 3.2.

3.1.8 Ground-disturbing activities

Typically including new construction, military training activities, lead-based paint soil abatement, and road construction. Examples of proposed ground-disturbing activities at FSH from the Project Priority list include clean-up of the Salado Creek area, repair and upgrade of the water distribution system, a tank trail-stream cross repair, installation of new playground equipment, and replacing housing sewer lines.

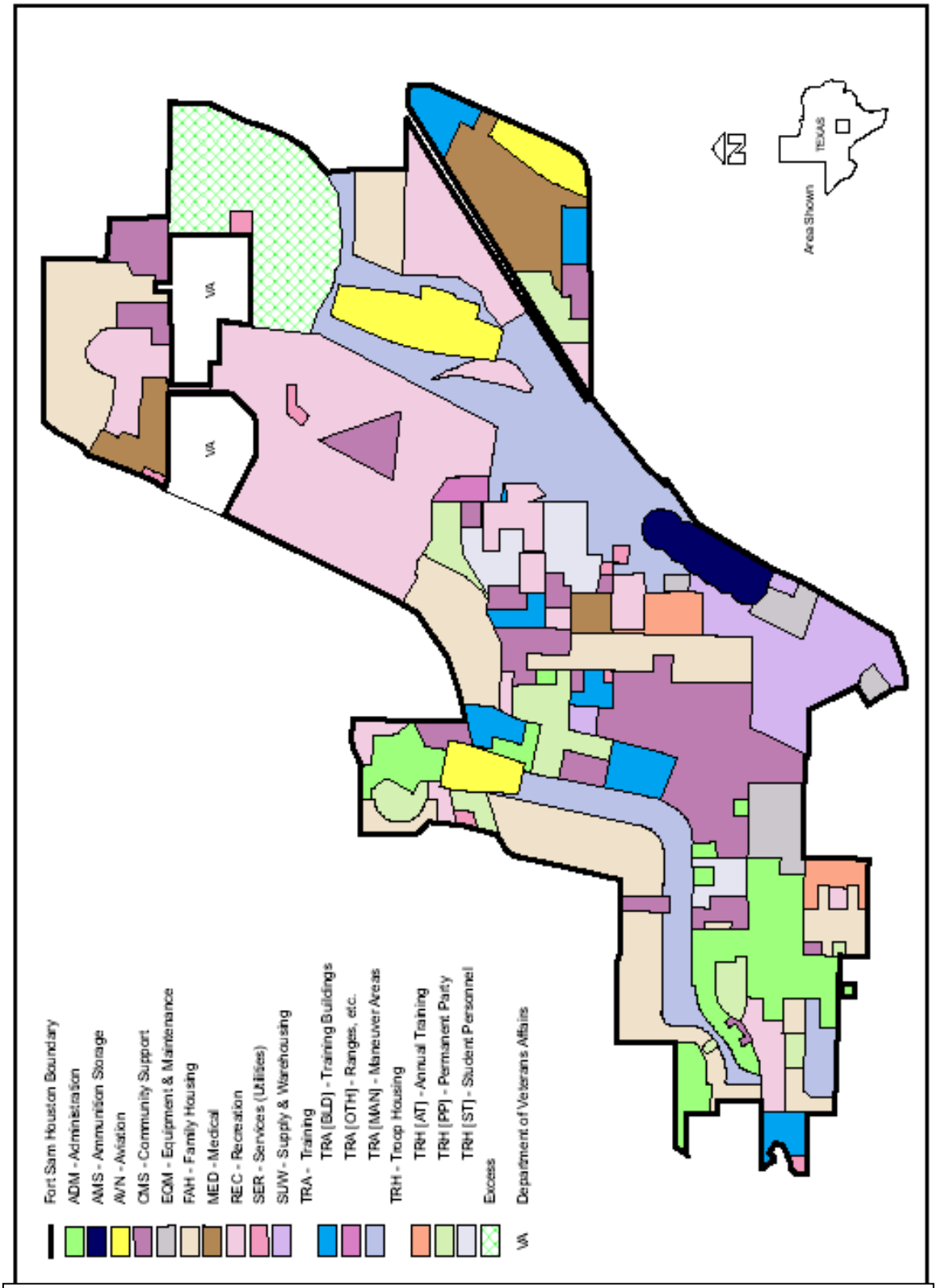


Figure 3-1
Land-use areas at Fort Sam Houston

3.2 Past and Proposed Undertakings

Below are summaries of proposed undertakings at Fort Sam Houston, Camp Bullis, and Canyon Lake Recreation Area from the past year and over the 5-year period of this HPC. These lists are for planning purposes only, and should not be viewed as projects assured of being funded over the 5-year period. Fort Sam Houston is also slated under the Residential Communities Initiative to privatize 935 housing units in FY2003.

All physical needs that are identified are processed through the Department of Public Works. The need is first validated and screed to see if the need can be met with existing resources. If not, the project begins a programming process that further defines its scope. Projects may consist of repairs, renovations, upgrades, construction, demolition or real estate actions (such as acquisition, lease or easement). Projects are tracked as disposal/removal projects, minor projects (project priority list), or major (Military Construction [MILCON]) projects. When sufficiently defined, the Master Planning Branch allocates a suitable site for the project, in consideration of environmental, operational, and land use compatibility issues. Then the project may be further refined to address specific aspects such as utilities, access, contingent demolition, historic context, safety, landscape and design, and requirement permits. At this stage, all new projects are presented to the Primary Installation Planning Board (PIPB) for siting approval. The PIPB is chaired by the garrison commander, and has representatives from operational, engineering, and tenant organizations. Projects

on Camp Bullis and CLRA are presented to an equivalent board, the Subinstallation Planning Board (SIPB), where approval comes from the subinstallation commander.

Fort Sam Houston Facilities Reduction Program Projects

Building Number(s)	Category Code	NHLD/Conservation Area Status	Use
		Program FY 2003	
2915-2196	INE		Latrine
3180	INE		Latrine
3398	INE		Latrine
P2789	INE		Dining
		Program FY 2004	
4019	NRE		Administrative
		Program FY 2005	
20	NRE	C-NHLD	Storage
1640	INE		Storage
		Program FY 2006	
184	NRE	C-NHLD	Housing
484	NRE	C-NHLD	Housing

*Temporary Building
Historic District Status:
C-NHLD = Contributing to NHLD
C-CA = Contributing to Conservation Area
Notes: Historic Category definitions are: NRE = National Register Eligible or Listed, INE = Ineligible for the National Register

Camp Bullis Facilities Reduction Program Projects

Building Number	Use	Category Code	Contributing Element of Proposed NRHP District
	FY 2003		
5122	Training	NRE	Yes
5123	Training	NRE	Yes
5902	Administrative	NRE	Yes
5903	Administrative	NRE	Yes
5901	Latrine	INE	No
5906	Administrative	INE	No
5907	Latrine	INE	No
6231	Storage	INE	No
	FY 2004		
6150	Utility	INE	No
6157	Utility	INE	No
6331	Utility	INE	No
6335	Utility	INE	No

6448	Utility	INE	No
6495	Utility	INE	No
6602	Utility	INE	No
	FY 2005		
5108	Administrative	NRE	Yes
5110	Storage	NRE	Yes
	FY 2008		
P6201	Housing	NRE	Yes
6201	Housing	NRE	Yes
6202	Housing	NRE	Yes
6203	Housing	NRE	Yes
6204	Housing	NRE	Yes
B6201	Housing	INE	No

Notes: Historic Category definitions are: NRE= National Register Eligible or Listed, INE = Ineligible for the National Register

Proposed Construction Projects

Project Description	Program	FY
Fort Sam Houston		
AFH - Revit. Patch Caffee - Phase I	AFHC	2003
Salado Creek Recreation Area	AMWRF	2003
Widen/Extend Scott Road	MCA	2003
AFH - Revit. Patch Caffee - Phase II	AFCH	2004
AFH Harris Heights - Phase I	AFHC	2004
Information System Facility	MCA	2004
AFH Harris Heights - Phase II	AFHC	2005
Applied Instruction Building	DoD Medical	2005
Medical Training Parks	DoD Medical	2005
Stables	AMWRF	2006
Training Aids Center	MCA	2006
Thrift Shop	NAF	2007
Drama - Music Center	MEA	2008
Camp Bullis		
Dining Facility	MCA	2004
Defense Medical Readiness Training Infrastructure Complex	DoD Medical	2005
Outdoor Recreation	AMWRF	2005
Applied Instruction Building	DoD Medical	2008

MCA = Military Construction Army
AMWRF = Army Morale, Welfare, and Recreation Fund
AFHC = Army Family Housing Construction
NAF = Non-appropriated Funds
MEA = Miscellaneous Expense Allowed

1

Examples of Fort Sam Houston Maintenance and Repair Projects

Priority	Description	Facility Number(s)	Category Code	NHLD Status*
00	Remove asbestos floor tile	1446, 1451	INE	
00	Construction latrine	1379	INE	
00	Correct Risk Assessment Code for bat/bird roost	2840, 2841	INE	
00	Provide parking spaces	2635, 4651		
00	Develop/replace hutment			
00	Repair/remove HVAC	2006, 2064	NRE	C-NHLD
00	Clean up Salado Creek area	3404	INE	
00	Interior painting	141	NRE	C-NHLD
10	Relocate Material branch	6894		
10	Repair/upgrade water distribution system Phase 7	3600	INE	
10	Replace HVAC system	6854		
10	Expand telephone switch node	1384	INE	
10	Tank trail-stream cross repair	2410	INE	NC-CA
10	Exterior paint porches at Artillery Post	168, 169,170,173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183	NRE	C-NHLD
10	Install lights	6254		
20	Upgrade air conditioning			
20	Reno Room 109-Rhoades Dental	2375	INE	NC-CA
20	Demolition front/rear porches	601, 602, 603, 604, 605, 606, 607, 609, 610	NRE	C-NHLD
20	Demolition of various buildings in FY 1999 contract	452, 496, 1030, 1135, 1287, 1461, 2013, 2300, 3393, 3824, 4128, 4224, 6218	multiple	multiple
20	Demolition/repair connecting corridors	2370, 2383	INE	
20	Alter/partial demolition	56	NRE	C-NHLD
20	Alter/demolition porches	2195	NRE	C-NHLD
20	Alter building for MEPS/Navy Recruiting District	2376		
20	Replace back steps/stoops			
20	Replace HVAC system	590, 591	INE	
30	Upgrade parking	3600	INE	
30	Replace air handlers	2840, 2841	INE	
30	Indefinite Quantity paint	HA 1		
30	Replace guest room doors	590, 591	INE	
30	Replace single pane with double pane	2792	NRE	C-CA
30	Paint interior elevator cars	592, 1384	INE	
40	Foundation study	48	NRE	C-NHLD
40	Cost estimate for construction/repair porch			
40	Replace roof	4193	NRE	
50	Replace HVAC system	1222	NRE	C-NHLD
50	Enclose water heaters (21 each)			
50	Repair floor supports			
60	Repair/replace HVAC	2059	NRE	C-NHLD
60	Repair porch	48	NRE	C-NHLD
70	Renovate photo lab	914	INE	
70	Repair porch areas	48, 107	NRE	C-NHLD
80	Renovate bathrooms	592, 1384	INE	
80	Replace HVAC system	2247	NRE	C-NHLD
80	Repair duplex gutters			

Maintenance & Repair Projects (cont'd)

Priority	Description	Facility Number(s)	Category Code	NHLD Status*
80	Concrete fill between driveway			
90	HVAC survey	2630	INE	
90	Replace chillers (CFCs)	2630	INE	
90	Replace transformers	2841	INE	
90	Install electrical outlets	590, 591, 592, 1384	multiple	
90	Revitalization	11	NRE	C-NHLD
100	Renovation for life safety	1002	INE	
100	Relocate compressor to outside	48	NRE	C-NHLD
110	Repair/replace roof walkway	2840, 2841	INE	
110	Air conditioning system	617, 688	NRE	C-NHLD
110	Install playground equipment	4660		
120	Expand parking at Youth Center	4650		
120	Replace boiler			
130	Install fire protection	4015	NRE	
130	Replace water pipes	107	NRE	C-NHLD
130	Replace housing sewer lines			
140	Repair fence along Blanco Road	6830		
140	Improve safety measures			
150	Replace fence-Watkins Terrace	4568		
150	Repair bathroom floor on first floor	9672		
150	Sandblast stairwell and paint			
160	Pave parking lot Building 43	143	NRE	C-NHLD
160	Seal cracked pavement	258	NRE	C-NHLD
160	Replace sidewalk at Building 2791	4652		
160	Repair/resurface parking lot	4640		
160	Repair/replace crosswalk/drive	4651		
160	Restripe/reflectors Binz Engleman	4645		
160	Restripe lot at Building 1002	4650		
160	Correct drainage at Salado Creek	4660		
160	Reconstruction Williams Road			
160	Install photoelectric switches	48, 617, 688	NRE	C-NHLD
160	Install photoelectric switches	4193	NRE	
160	Install photoelectric switches	580, 591, 592, 1384	Multiple	
160	Enlarge parking lot at library	4650		
160	Tear batting cages down; concrete floors for dugouts; pave area	4540		
160	Repair west parking lot	16	NRE	C-NHLD
160	Road paving reconstruction W.W. White	4645		
160	Reconstruction Watkins Terrace Blvd.	4645		
160	Restripe parking areas	4650		
170	Repair boiler	407	NRE	C-CA
170	Upgrade interior	590, 591	INE	
180	Paint	2382	NRE	C-NHLD
180	Paint bathrooms	131	NRE	C-NHLD
180	Treat for mold/mildew	1374, 1375, 1379, 1380	INE	
180	Paint basement	126	NRE	C-NHLD
180	Repair cracks in foundation	2263	NRE	C-NHLD
180	Exterior repair/paint	4203, 4206, 4208	NRE	
180	Exterior paint	4191	NRE	
180	Interior painting IDQ	147	NRE	C-NHLD
180	Paint exterior	1159, 1160, 1161	INE	
180	Paint exterior	1162, 2797	INE	
180	Repair porch deck and columns	123	NRE	C-NHLD
180	Paint exterior	1159	INE	
180	Repaint common areas	44	NRE	

Maintenance & Repair Projects (cont'd)

Priority	Description	Facility Number(s)	Category Code	NHLD Status*
180	Removal of lead-based paint for quarters	121, 167, 415, 420, 448, 451, 477, 487, 524, 541, 551, 753, 756, 776, 826	multiple	
180	Install fire sprinklers	590, 591	INE	
180	Repair and paint	261	NRE	C-NHLD
180	Building Repair for Naval School of Health Sciences relocation	2266		
180	Repair and paint	2250	NRE	C-NHLD
180	Paint exterior	4205, 4209	NRE	
190	Replace roof	261, 905, 1290, 1387, 1395, 2250	multiple	
190	Repair/replace roof	961, 2263, 2610, 5114	multiple	
190	Repair leaking roof	4055		
190	Install dumpster screening			
190	Replace roof and units, Burger King	2540		
200	Construct consolidated maintenance shop			
200	Install additional street lightning	4674		
210	Upgrade parking lot			
210	Abate/preparation lead-based paint interior	4019	NRE	
220	Repair/replace perimeter fence Phases 2, 3, 4, and 5	6830		
220	Resurface and restripe lot			
230	Construction new temporary parking area			
230	Install fire extinguishers			
240	Secure doors or provide berm			
240	Install ceiling fans	590, 591, 592, 617, 688, 1384	multiple	
250	Construction swimming pool			
250	Replace HVAC and controls	44	NRE	
260	Replace/install central air-heat	16	NRE	C-NHLD
270	Install explosion-proof light	4055		
280	Repair HVAC design deficiencies	4194	NRE	
280	Construction berms	2378, 2382, 3520, 4055, 4226		
290	Install ball field lights and sprinklers	4540		
300	Correct air conditioning deficiency Building 462	1462	INE	
300	Connect floor drain to sewer	320		NC-CA
300	Replace four each air handlers	1395	INE	

Historic Category Definitions:

NRE= National Register Eligible or Listed
INE = Ineligible for the National Register

NHLD Status:

C-NHLD=contributing to NHLD
C-CA=contributing to conservation area
NC-CA=noncontributing to conservation area

4.0 ARMY-WIDE EXEMPTIONS AND CATEGORICAL EXCLUSIONS

There are Army-wide exemptions for undertakings where there is an imminent threat to human health and safety [AAP Section 4.5(a)(3)]:

- in-place disposal of unexploded ordnance,
- disposal of ordnance in existing open burning/open detonation units;
- emergency response to releases of hazardous substances, pollutants and contaminants; and,
- military activities in existing designated surface danger zones (SDZs). Surface Danger zones means the area designated on the ground of a training complex (like Camp Bullis), to include associated safety areas, for the vertical and lateral containment of projectiles, fragments, debris and components resulting from the firing or detonation of weapon systems to include exploded and unexploded ordnance

Unexploded ordnance and explosive hazards have been found throughout the maneuver areas of Camp Bullis, and are disposed of by the 737th Ordnance Detachment from FSH using the explosive ordnance demolition range in the northern portion of Maneuver Area 9.

The EPA categorizes FSH as a large-quantity hazardous waste generator. The wastes generated include solvents, pain, batteries, antifreeze, and lab packs. Hazardous wastes on FSH and Camp Bullis are accumulated at approximately 16 satellite points on the installation. The wastes are subsequently moved with the installation to a Less-than-90-day Central Hazardous Waste Storage area. An EPA-licensed transporter then move wastes to an approved off-site disposal facility. Petroleum fuels and products as well as waste petroleum, oil, and lubricant (POL) products are stored in various tanks at FSH and Camp Bullis. Materials at Camp Bullis include diesel fuel ,gasoline, kerosene, waste oil, and waste antifreeze.

Certain other undertakings have anticipated minimal impacts to historic properties. A list of such undertakings has been developed in consultation with the consulting parties. Criteria under which an undertaking might be considered a categorical exclusion may include the following:

- there is no subsurface ground disturbance
- road and trail maintenance and utility repair is limited to the existing right-of-way
- the landscape is not modified in any way
- the character or nature of a historic building, structure or object, or its surroundings are not altered.

The list of undertakings that, under normal circumstances, are categorically excluded from Section 106 review can be found in 6.2.

5.0 MANAGEMENT GOALS AND PRACTICES

The purpose of this section is to establish proactive consideration of preservation concerns carried out by management practices that are integrated into day-to-day installation activities. It contains a description of the desired future condition for historic properties over the course of the five-year planning period and a description of the goals for management and preservation of those properties. Management practices that will be employed to achieve the desired future condition and management goals are established.

Appendices A and B of this HPC list the historic properties that are located on Fort Sam Houston and its sub-installations along with their current condition (still to be inserted by FSH). This section of the HPC specifies the *desired* condition for each class of historic property (archeological sites; historic buildings and structures; and properties of traditional religious and cultural importance to Federally-recognized Indian Tribes).

The specific desired future condition for individual properties or areas needs to be discussed and determined among Fort Sam Houston and the consulting parties -- additional face-to-face meetings should be held to discuss this specific issue. These should reference specific sites, buildings, structures and what preservation conditions are being sought.

5.1 Desired Future Condition of Historic Properties

The desired future condition reflects expected changes in condition that may be realized over the course of the planning period of this document. Considerations for changes in the condition of historic properties include availability of funding over the planning period, possible undertakings that may have an effect on the

property, and mission impacts that might occur as a result of changing the condition of the property.

Archeological Sites: Archeological sites should be avoided to the extent possible in the execution of all undertakings. Thus, archeological resources should remain undisturbed. Exposure of archeological sites through natural processes (erosion) should be stabilized.

Historic Buildings and Structures: Historic buildings and structures should be maintained to protect against deterioration, including the maintenance of exterior cladding, roofing and windows, cleaning and repair of gutters and downspouts. Properties whose structural stability is threatened by neglect should be stabilized and sealed against weather and vandalism.

Properties of Traditional Religious and Cultural Importance to Federally-recognized Indian Tribes: Properties of Traditional Religious and Cultural Importance to Federally-recognized Indian Tribes should be identified and protected against disturbance or alteration, as specified in consultation with Tribal members.

5.2 Goals for Preservation and Management of Historic Properties

The goals identified in this section represent those activities that can reasonably be achieved over the course of the planning period and for which funding is

available. The planning period for purposes of the HPC is the five-year period during which the certified HPC is in effect. Funding is obtained through the Army's Environmental Program Requirements system. It is the CRMs responsibility to identify and program for historic property and National Historic Preservation Act requirements through the annual budgeting processes. All projects requiring expenditure of funds in future fiscal years are subject to availability of funds for purposes of compliance with the Anti-Deficiency Act.

Additional goals should be discussed by Fort Sam Houston (and within Fort Sam Houston division) and the consulting parties , especially for specific properties or areas of the installation.

5.2.1 Reduce in-leased space, locating activities in underutilized facilities on FSH;

5.2.2 Partner with local communities to enhance use of historic properties

5.2.3 Renovate and reuse buildings with historic value that are considered to be underutilized facilities through;

5.2.3.1 Traditional stationing and funding;

5.2.3.2 Lease initiatives; and

5.2.3.3 Excess process

5.2.4 Maintain current listing of historic properties through continued identification and evaluation. Efforts should cover the following in prioritized order:

5.2.4.1 Identify, inventory and evaluate historic gates at Fort Sam Houston.

5.2.4.2 Identify, inventory, and evaluate Cold War-era properties at Fort Sam Houston.

5.2.4.3 Continue to identify, inventory, and evaluate all architectural and historic landscape elements within the existing National Historic Landmark District (NHLD).

5.2.4.4 Continue to identify, inventory and evaluate all archeological properties within the existing NHLD.

5.2.4.5 Identify properties of religious and cultural significance to Federally-recognized Indian Tribes.

5.2.4.6 Identify, inventory, and evaluate all architectural and historic landscapes outside the existing NHLD and determine if they contribute to the existing district or if they independently meet the criteria for inclusion in the National Register of Historic Places (NRHP).

5.2.4.7 Identify, inventory, and evaluate all archeological properties outside the existing NHLD and determine if they contribute to the existing district or if they independently meet the criteria for inclusion in the NRHP

5.2.4.8 Identify, inventory, and evaluate all architectural properties and historic landscapes at CB.

5.2.4.9 Identify, inventory, and evaluate all archeological properties at CB.

5.2.4.10 Continue consultation with Native American tribes that have an historical association with the geographic region.

5.2.5 Improve the quality of the visual environmental and quality of the working environment through use of Installation Design Guidelines.

5.2.6 Integrate the developing GIS historic properties database into the day-to-day management of resources.

5.3 Management Practices

These management practices apply to all historic properties at Fort Sam Houston.

5.3.1 Utilize Installation Design Guidelines for the design and siting of future facilities, and for the renovation and maintenance of existing facilities at FSH and its sub-installations where possible.

5.3.2 Use The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings when possible to avoid adverse effects on historic properties.

5.3.3 Avoid known National Register-eligible archeological sites when possible.

5.3.4 Develop and maintain database to track and record Fort Sam Houston's decisions affecting historic properties IAW the SOPs defined below.

5.3.5 Obtain technical assistance from Federally-recognized Indian Tribes to identify properties of traditional religious and cultural importance that may be affected by installation operations. In order to gain the expertise of Federally-recognized Indian Tribes, Fort Sam Houston will develop a cooperative agreement to obtain required technical assistance.

5.3.6 Identify archeological sites at risk.

5.3.7 Define character defining elements of historic properties within the NHLD and other properties determined eligible for listing on the National Register of Historic Places.

6.0 STANDARD OPERATING PROCEDURES FOR INSTALLATION DECISION-MAKING PROCESS

The SOPs that establish the Fort Sam Houston's internal decision-making process are those SOPs that lay out how Fort Sam Houston will manage historic properties affected by installation undertakings. These SOPs rely on the goals, management practices and historic preservation standards that were developed in the preceding sections. The underlying goal for proper management of historic properties is to avoid actions that adversely affect the property in the first place. Some historic properties may be affected during the day-to-day operations at an installation in the conduct of its military mission. The following eight SOPs define the steps in Fort Sam Houston's decision-making process to take these affects into account:

- Identifying undertakings and areas of potential effect (APE);
- Applying Categorical Exclusions and Army-wide Exemptions;
- Insuring that historic properties within an APE are located, evaluated for NRHP eligibility, and assessed for effect;
- Assessing adverse effects;
- Applying best management practices that avoid adverse effects and meet the installation's preservation goals;
- Reviewing alternatives for undertakings that have an adverse effect on historic properties and where best management practices cannot be applied;

- Treating adverse effects when alternatives reviews could not identify a “no impact” alternative; and,
- Documenting acceptable loss when treatment is not in the public interest or financially or otherwise feasible.

In order to complete the decision-making process for a project, the FSH Installation Commander will initiate these seven steps, in order; proceeding to the next only when necessary and when the former step has been adequately completed. The first eight SOPS define this decision-making process; the additional SOPs apply to special categories of undertakings at Fort Sam Houston.

6.1 SOP 1: Identifying Undertakings and Defining APE(s)

Note: The SOPs presented here are intended only to initiate discussion on the HPC. The content of the SOPs in the final HPC will be the result of consultation on development of the HPC with consulting parties.

The Fort Sam Houston CRM will determine whether an installation project or activity qualifies as an undertaking, and if so, whether that undertaking has the potential to affect historic properties. The CRM will also define the area(s) that are likely to be affected by that type of undertaking. The CRM will insure that each project file documents the undertaking determination and APE and the rationale that was used in making these determinations.

6.1.1 Determine if Undertaking

An "undertaking," as defined under the AAPs, describes

> A project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of the Army, including those carried out by or on behalf of the Army, those carried out in whole or in part with Army funds, and those requiring Army approval.

If a project, activity, or program at Fort Sam Houston or its sub-installations involves the use of Army funds, behalf of the Army, or with Army approval, that project, activity, or program will be considered an undertaking, and the CRM shall then move on to defining the area of potential effect.

If it does not qualify as an undertaking, no further action shall be required under this HPC.

6.1.2 Define the APE

The "area of potential effect" (APE) is defined at section 1.5 of the AAP as

> the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking."

The size of the APE is determined by the CRM on a case-by-case basis, and includes in its calculation the scale and nature of the undertaking, taking into account the possibility that visual and audible impacts may expand the APE outside of the physical project area. The APE should be logically linked to the project in question. Generally, the size of the APE will be commensurate with the size of the project. Definition of the APE includes both direct and indirect effect areas.

Examples of APEs should be provided based on additional consultation between FSH and the consulting parties

Determining an APE for a project:

1. The CRM will categorize the undertaking, such as repair and maintenance, ground-disturbing activity, etc. (see Section 3.0 in this document).
2. Using SOP 2, the CRM will determine if the undertaking is one that has been determined to be either exempted or categorically excluded from further review. If it is, SOP 2 will be followed; if it is not, the CRM will continue to step 3.
3. The CRM will determine whether the effects typically associated with this category of undertaking are the expected effects for the project. The CRM will determine whether the scope and/or nature of the project might result in additional or other effects, including visual and/or audible impacts, and secondary and cumulative effects.
3. Based on anticipated effect(s) the CRM will determine <u>where</u> those effects might occur in relation to the project. The areas where effects might occur constitute the APE.
4. The CRM will examine the APE with respect to the anticipated effects to determine whether the undertaking activities are likely to affect historic properties (i.e. ground disturbing activities adjacent to streams are likely to disturb archeological sites, demolition or rehabilitation of building within the National Landmark Historic District are likely to affect the district). This check will include an examination of FSH's GIS maps/databases for information on possible historic properties, as well as a map check of known historic properties as kept by the TX SHPO.

5. The CRM will complete this process for all alternate project locations.

6. The CRM will delineate the APE boundaries on a project map for use in the NEPA documentation for the project, separately delineating the areas of direct and indirect effect on possible historic properties.

After the APE has been determined, the CRM will continue to SOP 3.

6.2 SOP 2: Categorical Exclusions and Army-wide Exceptions:

Note: The SOPs presented here are intended only to initiate discussion on the HPC. The content of the SOPs in the final HPC will be the result of consultation on development of the HPC with consulting parties.

After a project, activity, or program has been determined to be an undertaking, and that undertaking categorized according to Section 3.0, the CRM shall determine if the undertaking is one of the following.

6.2.1 Exempted Undertakings

These undertakings do not require compliance with this HPC due to the imminent threat to human health and safety:

- in-place disposal of unexploded ordnance,
- disposal of ordnance in existing open burning/open detonation units;
- emergency response to releases of hazardous substances, pollutants and contaminants; and,
- military activities in existing designated surface danger zones (SDZs).

See Section 4.0 of the HPC for more information on these conditions at Fort Sam Houston and Camp Bullis

6.2.2 Categorical Exclusions by Categorized Undertaking

This list of categorical exclusions is based on undertakings that have previously been exempted from SHPO and Council review (documented in 1997

SOP 2: Categorical Exclusions

PA),due to the minimal potential for these undertakings to have adverse effects on historic properties at Fort Sam Houston and Camp Bullis.

Maintenance and Repair

1. Repair of existing elements that are not visible or that do not contribute to the historic or architectural significance of architectural properties. The repairs will be limited to those requiring no structural modifications.

2. Refinishing in kind, i.e. painting surfaces with the same, or original, materials, and same, or original, color.

3. Energy conservation measures that are not visible or that do not alter or detract from those qualities that make the property NRHP eligible, i.e.,

    a. Insulation in roofs, crawl spaces, ceilings, attics, walls, floors and around pipes and ducts. (This exclusion does not include the installation of urea formaldehyde or other materials that induce or introduce moisture into properties, or insulation that does not have a vapor barrier. It also does not include any activity that lowers ceiling height to accommodate duct work.)

    b. Caulking and weather stripping, provided that the color of the caulking is consistent with the appearance of the properties.

4. All maintenance work on existing features such as roads, fire lanes, mowed areas, landing strips, drop zones, disposal areas, and ditches. Maintenance work includes only surface work to preserve a suitable, usable conditon. More extensive work involving re-grading or a major renovation of the surface will require compliance with the other SOPs.

5. Maintenance to buildings that are less than 50 years old, provided they do not qualify under the criteria consideration for properties achieving significance within the past 50 years (see HPC 6.3: Identifying and Evaluating Historic Properties).
6. Routine grounds maintenance that does not result in ground disturbance of more than the top 6 inches of soil; or ground disturbance in areas that have previously been documented as disturbed.

Rehabilitation

1. Replacement in-kind, i.e. matching the configuration, material, size, detail, color and construction of the historic fabric.
2. Energy conservation measures that are not visible or that do not alter or detract from those qualities that make the property NRHP eligible, i.e., modifications to the HVAC control systems, conversions to alternative fuel.
3. Alterations to the interior of historic buildings and structures that have been significantly altered in the past and do not currently retain any character-defining elements that would make those buildings and structures eligible for the National Register of Historic Places.

Mothballing/Layaway

1. Mothballing of historic properties provided the action is completed in accordance with the procedures established by the National Park Service in Preservation Brief 31: Mothballing Historic Buildings (http://www2.cr.nps.gov/tps/briefs/brief31.htm)

Demolition

1. Demolition of World War II temporary buildings IAW the 1986 Army-wide Programmatic Agreement.

2. Demolition of buildings and structures that have been previously evaluated for NR eligibility and have been determined to be ineligible for the National Register, and which will not negatively impact existing historic properties or result in ground disturbance.

3. Demolition of buildings and structures that is covered through other Nation-wide programmatic means (Nationwide PAs, Capehart-Wherry Era Housing Program Comments, etc).

New Construction

1. Construction in areas where the APE of the construction project does not include historic properties, and which does not require ground disturbance

Ground-disturbing activities

1. Categorical Exclusions will not apply to currently recorded archeological properties that are eligible for, or potentially eligible for, inclusion in the NRHP.

2.. Continuing use of existing training facilities on FSH and CB lands for training exercises.

3. Agricultural and grazing leases; including the continued use of agricultural plowing in areas that have been previously plowed to the same depth, using similar methods.

4. Disturbed areas at CB as previously determined, and indicated on Figure II-1 of Camp Bullis CRMP (1996).

Other activities

1. Hunting and fishing actions.

2. Reviews, reports, studies, undertakings for planning purposes and decision-making, including reports of excess, provided that no lands or facilities are physically laid-away or disposed of by demolition, sale, transfer, without appropriate documentation, coordination, or other action as required by this HPC. If the CRM determines that the undertaking falls under one of the above exemptions or categorical exclusions, it will be documented in the NEPA documentation for that project and no further action will be required under the HPC

The CRM will coordinate the list of exempted undertakings and categorical exclusions with all other installation staff responsible for carrying out any of these activities on Fort Sam Houston, and require a 7-day notice of these activities. The CRM will monitor the use of exempted undertakings and categorical exclusions and maintain a record of their use for semi-annual review with the

installation staff. The results of this internal review will be included in the annual review and monitoring report.

6.3 SOP 3: Identifying and Evaluating Historic Properties

Note: The SOPs presented here are intended only to initiate discussion on the HPC. The content of the SOPs in the final HPC will be the result of consultation on development of the HPC with consulting parties.

All identification, evaluation and assessment work will be performed by a qualified professional who meets the appropriate discipline guidelines in Secretary of the Interior's Professional Qualification Standards at 36 CFR 61, Appendix A. If the Fort Sam Houston CRM does not meet these qualifications or have the expertise on staff to meet them, qualified assistance must be obtained IAW SOP 10.

6.3.1 Identification of Historic Properties

The following provides guidance for historic properties identification. The procedures are appropriate for the majority of projects conducted on Fort Sam Houston. Large-scale projects with multiple and far-reaching effects may require procedural modifications tailored specifically to the undertaking. These large-scale projects would be exceptional, unusual undertakings that would occur rarely, such as changes in mission, restationing of troops, etc. All such modifications should be developed during the review and monitoring process, as new requirements for the upcoming year are identified and project specifics for the forthcoming year are addressed.

The purpose of identification is to collect information about historic properties within an APE. All identification activities should be designed to achieve the preservation and management goals as defined in the HPC, as well as refine and/or add to the background information included in the PLS. Identification activities are grouped into three sets of procedures: pre-inventory preparation, field procedures and integration of results. Pre-inventory preparation and results integration are the same for the identification of all expected historic property types and are discussed below. Field procedures for the identification of archeological sites, historic buildings and structures, and properties of traditional religious and cultural importance differ and are discussed individually.

Pre-Inventory Preparation:

1. Review background data. The CRM will conduct a background review, commensurate with the size and scale of the project. The review will establish whether the APE(s) has/have been inventoried previously or inspected to identify historic properties and determine what property types are likely to be found in the APE(s).Fort Sam Houston's GIS data will be consulted when appropriate, along with all PLS information and information on historic properties maintained by the TX SHPO.

    a. If the area has been investigated previously, the CRM will assess the quality of any collected data and determine if additional identification efforts are required.

b. If the area has not been investigated or if it has been investigated but data quality is poor, further identification efforts may be required. Generally, data quality is considered poor if identification was carried out with obsolete methods or by unqualified individuals, or if only certain kinds of properties were considered.

c. If the backgound data review reveals that the area has been totally disturbed, no additional identification will be necessary

2. The CRM will determine the general size of the area of potential effect(s based on the type of project being undertaken to help determine the appropriate field identification methods.

3. Based on the size of the APE, PLS data, and/or predictive model results, the CRM will determine whether the collective data provides a basis for decision-making without additional identification activities. When the APE is small and high-quality data are available from a similar or adjacent area, or when comprehensive background data are available, it may be possible to extrapolate to or make inferences about the area in question without conducting a field identification inventory.

4. A decision not to proceed with further identification activities will be made by the CRM and documentation of that decision included in the

NEPA documentation for the project or activity, along with the basis for this decision.

If an inventory for historic properties is required, the CRM, in consultation with a qualified professional (if required), will do the following

1. Determine inventory strategy (reconnaissance, intensive, or a sampling strategy). There is no single inventory technique that will fit every project. The scope and nature of the project, anticipated effects, and the property types predicted to be located within the APE based on the review of background data will help determine the methodology for specific APEs. A single project that has multiple APEs, each representing a different type of effect or expected property type, will most likely require different field identification methods. Generally, field inventory may be characterized by two techniques: reconnaissance and intensive.

    a. Reconnaissance inventory. Reconnaissance inventories are most often used when it is questionable that historic properties exist within an area. Methods may include visual identification of standing historic structures, interviews with local residents, and archeological inspection of sample tracts, coupled with appropriate background research. A reconnaissance inventory may result in the conclusion that historic properties are extremely

unlikely, or that intensive inventories may be needed in a portion of the APE. Documentation for reconnaissance inventories shall include:

i. The kinds of properties looked for;
ii. The boundaries of the area inventoried;
iii. The method of inventory, including the extent of inventory coverage;
iv. Specific properties that were identified, and the categories of information collected; and
v. Inventoried areas that did not contain historic properties.

b. Intensive inventory. The size and complexity of the land area, whether the area is urban or rural, the types of properties expected, the ease or difficulty with which such property types can be identified, the extent of Federal control over the lands involved, the ease or difficulty with which access can be obtained, and the nature of the projected effects contribute to the decision to conduct an intensive inventory. Intensive inventory methods are used to determine what specific historic properties are located within a defined area or to collect enough data on a specific historic property to allow for later evaluation. Intensive inventories reveal the actual types and distribution of properties

within an APE, their location and condition, and their physical extent. Documentation for intensive inventories shall include:

i. The types of properties the inventory is designed to identify;
ii. The boundaries of the area inventoried;
iii. The method of inventory and the extent of inventory coverage;
iv. The precise location of identified properties; and
v. Information regarding the appearance, integrity, and boundaries of each property.

c. Sampling. Sampling may be used to estimate the historic properties that might be located within the APEs of several project alternatives. Sampling may be random, stratified, or systematic, and may be approached in stages such that the results of the initial large area inventory are used to structure successively smaller, more intensive inventories. Sample strategies should be selected based on the research goals the inventory is expected to contribute towards, the type of expected properties and the nature of the area to be inventoried. Sampling provides information about the frequencies and types of properties identified within specific areas at various confidence levels. Predictive models are effective tools for the early stages

of planning an undertaking, however the accuracy of any model must be confirmed with field testing and should have written concurrence with the Texas SHPO before putting it to general use.

2. Review of Planning Level Survey Data and/or Additional Research. Before the actual field inventory, a more specific review of existing data is generally undertaken. In the absence of a completed PLS, a review of installation site and map files, previously developed historic contexts for the region, local histories, and any relevant information related to previous identification inventories or evaluations will be completed.

Integrating Results:

The CRM will insure all identification results are integrated into the PLS. If necessary, the historic contexts, definitions of property types, and the management goals will each be adjusted to reflect new data. Any newly identified historic properties will be documented in the project NEPA document.

Field Procedures:

1. Archeological Sites

   a. The goal of archeological field inventory is to identify the location, nature, and condition of archeological historic properties either previously identified, or heretofore unknown, within a proposed project's area of potential effect. Archeological historic

properties may include both prehistoric and historic archeological sites and artifacts, burials, landscape features including those related to military activities, and the remains of buildings and structures. Artifact collection at the identification level of inventory should be limited to diagnostic materials. Surface scatters will be noted, photographed, and used to identify possible follow-up site evaluations. Generally, fire-cracked rock *will not* be collected from prehistoric sites unless specific site circumstances dictate otherwise. Procedures for archeological field inventories include: pre-field briefing, identification of appropriate methodology for specific APE(s), field investigation, recordation, laboratory processing, and data compilation. As a matter of safety, explosive ordnance impact areas, as well as all live-fire ranges, will not be inventoried (see SOP 2: Exemptions)

b. Field Personnel. Field supervisors must meet the Secretary of Interior's Professional Qualification Standards at 36 CFR 61 Appendix A. All field technicians must have completed a formal archeological field school at a recognized university, and must have experience with both identification and evaluation archeological techniques. Each team member is required to attend a field safety and unexploded ordnance briefing prior to beginning field work. In the field, technicians are required to wear

proper field attire and equipment, and an identification badge that designates the wearer as part of an authorized research team. Field supervisors must consult the Range Control schedule before entering the field each day to determine site availability. Military training always takes precedence and it is the responsibility of the field supervisor to maintain contact with Range Control to coordinate schedule changes or report emergencies. Protocol between Range Control and field crews shall be established at the outset of each field season.

c. Pre-Field Preparation. The Fort Sam Houston CRM will provide field supervisors with the necessary background data to identify historic properties within the boundaries of the project area. Field supervisors will be informed of all previous investigations at Fort Sam Houston and Camp Bullis; expected property types within the APE; and environmental data including soil, geomorphology, vegetation, etc. Standardized field inventory forms for site and inventory recordation should be provided.

d. Field Methodology. Ground-disturbing undertakings are those most likely to have an effect on archeological sites. Ground-disturbing undertakings include but are not limited military training activities and construction projects. In the APEs for these

activities, intensive inventory methodologies that cover the entire project area to identify specific historic properties are most appropriate. Field identification methods for archeological sites include both shovel probe and surface inventory (when state guidelines or consulting parties specify alternate identification methods for archeological sites, they will be followed).

i. Shovel probe: Shovel probing is generally conducted when surface visibility is less than 70%. Where appropriate, shovel probing involves the systematic excavation of small shovel test units within the larger context of the inventory area. Shovel probes are excavated to cultural sterility, below the "A" and below or within the "B" soil horizons, typically to 50 cm below ground surface. All excavated soil is screened through ¼" mesh hardware cloth, after which the soil is returned to the unit, replacing any sod as well. Shovel probes containing artifacts (positives) are bracketed by secondary units at a consistent (not less than 5m) interval in the cardinal (N, S, E, W) directions until the extent of the cultural area is defined. In areas with several positives, two successive "negatives," are required in each cardinal direction to determine the boundaries of the cultural area.

ii. Surface inventory: This method is appropriate for all areas that have high surface visibility (>30%), for steeply sloped areas, or for the identification of building and structural remains. Surface inventory should be undertaken systematically with field personnel observing the ground along evenly spaced transects.

Additional guidance on survey procedures, transect intervals, sampling methods, should be discussed and provided in an appendix.

iii. Sampling: Sampling may be appropriate for identifying alternatives with least effects on resources when several project locations are being considered for an undertaking. Sampling methodologies will be reviewed by the consulting parties at the annual review and monitoring meeting.

iv. Previously documented sites: When archival evidence indicates that features (mounds, historic sites) were historically located within an APE, an effort should be made to confirm the location of the properties and assess their condition.

e. Recordation. If GPS is available, the boundaries of the inventoried area as well as the locations of any positive shovel

probes or surface finds should be recorded by GPS receiver as well as documented in field notes. If GPS is not available, the locations of any artifact concentrations or patterns of artifact distribution should be mapped and documented. For artifacts recovered from shovel probes, the stratigraphic position of the artifacts and soil profiles from the site area should be recorded and the artifacts placed in sealed field bags labeled with the project name, provenience, date and initials of collector. Field notes should also include a description of environmental and topographic features, surface disturbances and military features. The condition of the archeological site should be recorded in detail, including stratigraphic integrity (determined from soil profiles), and surface disturbances, either cultural and/or environmental. Recordation should include photographs of all visible features such as mounds, architectural ruins, etc..

f. Laboratory procedures. Diagnostic materials collected from identification activities will be cleaned, labeled, and catalogued in accordance with Curation of Federally-owned and Administered Archeological Collections (36 CFR 79) .

g. Data compilation. During this activity, the raw field data shall be analyzed, synthesized and converted into a format acceptable

under Curation of Federally-owned and Administered Archeological Collections (36 CFR 79) as a published final report.

2. Buildings and Structures.

Buildings are defined as those constructions designed primarily to provide shelter for human activity. Structures are functional constructions made for purposes other than providing shelter; bridges are the most common example.

a. The goal of field identification inventories for buildings and structures is to determine the location and condition of historic properties within the built environment of a project's APE. Identification of a building/structure as a historic property must be conducted by an individual meeting the Secretary of Interior's Professional Qualification Standards at 36 CFR 61.

b. Initial Documentation of Buildings/Structures within an APE. Recommendations that result from the planning stage regarding expected property types and effects, their location, and the relative size of the inventory area will determine the specific area to be investigated and the field investigation strategy. For those areas determined to need intensive investigation (areas requiring

identification of specific historic properties), the first step is the compilation of a list of all the buildings and/or structures within those areas. The list may be compiled from map, GIS data real property records, or from reconnaissance of the area. Because map data are dynamic, lists derived from this source will need to be field checked. The list should include type of property (housing, administration building, training facility, bridge, water tower, etc.), building number, address/location, and construction date if known from real property record.

c. Identification of Building as Historic. Identification of a building or structure as historic is primarily a research effort. The research should be directed towards capturing five areas of information. This information should be documented for each of the buildings on the above list:

i. Construction Date. Many buildings have the date of construction prominently displayed. More frequently, however, the construction date will have to be ascertained from documentary sources. Possible sources for dating Army-constructed buildings include Fort Sam Houston Real Property records and deeds. Sources for dating non-Army built buildings or structures include deeds, tax records,

building permits, newspaper accounts, plat maps, historic photographs, and anecdotal accounts. Tax rolls for specific townships provide a chain of ownership for properties and specify years in which capital improvements were made (e.g. the year that a homestead or farmstead was constructed on a plot of land). Generally, a building must be at least 50 years of age to be considered a historic property. A building less than 50 years of age may eligible for the National Register if it is associated with a significant event, person, or architectural style.

ii. Identification of original owner and/or other persons or events associated with the building. Ownership information is often available through a deed search or the property records at Fort Sam Houston. Additional resources for conducting historic research on properties at Fort Sam Houston and Camp Bullis include the City of San Antonio, the public library, the Bexar County Historical Commission, the San Antonio Conservation Society, and the Institute of Texan Cultures. The museum at Fort Sam Houston should also be consulted for information on properties dating to the military occupation period at Fort Sam Houston. Association of a building with an event or individual important in history

(local, state, or national) qualifies the property as significant under National Register Criteria A or B, respectively.

iii. Identification of architect. Although it is possible to identify the architect of a building, there is no consistent method or source for such information. Possible sources include building permits (the year building permits came into use varies by city and in general are unlikely prior to 1930s), local newspapers (if date of construction is known), city directories, and the archives of local architectural firms. Association of a building with an important architect may qualify the property as significant under National Register Criteria B and/or C.

iv. Architectural style. Many handbooks and websites are available with which to compare and identify the architectural styles of buildings, e.g. *A Field Guide to American Houses* (McAlester and McAlester 1998) or *World War II and the U.S. Army Mobilization Program: a History of 700 and 800 Series Cantonment Construction* (Wasch et al. 1993). Association of a building/structure with an architectural style characteristic of a class, style, school of architecture, or

period of construction, qualifies the property as significant under National Register Criterion C.

v. Identification of builder. See paragraph 3 above, Identification of Architect.

Buildings and structures that are at least 50 years old (or fall under the exception as noted in “Criteria Considerations” in HPC SOP 3) and that have at least one of the characteristics that qualify it for inclusion in the National Register under Criteria A, B, and/or C, are considered a historic property.

3. Properties of Traditional Religious and Cultural Importance to Federally-recognized Indian Tribes.

This class of property depends heavily on oral testimony for identification. Consequently, consultation with traditional groups affiliated with Fort Sam Houston lands is a critical aspect of identifying historic properties of traditional, religious, and cultural importance. Procedures for identifying traditional religious and cultural properties are as follows:

a. The CRM will determine from review of PLS and background data, available ethnographies, and consulting parties whether this is an expected or likely property type within the area of

investigation. Consultation in this regard must include representatives of all Federally-recognized Indian Tribes associated with Fort Sam Houston. If any source indicates that this property type is expected, it is incumbent upon the Fort Sam Houston CRM to make a good faith effort to identify such properties.

b. To identify traditional religious and cultural properties, it will be necessary for the CRM to consult directly with knowledgeable members of the Federally-recognized Indian Tribes. For some Tribes, individuals who retain knowledge regarding these properties may not be the contemporary Tribal leaders. The Tribal leaders, however, may be able to identify members of the Tribe who are knowledgeable about traditional matters and who are willing to consult and assist. Consultation with any Tribe is culturally sensitive and should follow protocol acceptable to the Tribe. Identification of specific individuals with whom consultation might take place and methodologies appropriate for collecting traditional and cultural information should be discussed and resolved during the annual review and monitoring meeting.

c. Areas identified during the consultation process as significant to Federally-recognized Indian Tribes require field inspection and

recordation. Field inspection may occur simultaneous with investigations for other property types; however, it is recommended that an individual with knowledge of ethnographic methodologies be present along with Tribal consultants who can assist in property location and definition. Field visits to sites with religious significance must be conducted in appropriate modes of behavior that should be discussed with Tribal consultants before the visit. Extensive recordation is not necessary; confidential, and sensitive information should not be collected and/or recorded and is not necessary to determine significance.

6.3.2 Evaluation of Historic Properties

Following is a general discussion of the key concepts that provide the framework for the evaluation process. During evaluation, the significance and integrity of a historic property are assessed, resulting in a determination of the property's eligibility for listing in the National Register of Historic Places (NRHP), i.e. following evaluation the property is either "eligible" or "not eligible." After the key concepts are introduced, procedures for evaluation of all property types are established. The evaluation procedures involve an assessment of the collected data against National Register criteria set forth in 36 CFR 60.

Data necessary to determine eligibility differs somewhat between archeological sites, buildings and structures, and properties of traditional religious and cultural importance. Therefore, procedures for the collection of field data specific to each property type supplement the general evaluation procedures set forth in 6.3.2.1. These procedures can be found at 6.3.2.2 through 6.3.2.4.

Under the National Register criteria for evaluation:

"The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
B. That are associated with the lives of significant persons in our past; or
C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
D. That have yielded or may be likely to yield, information important in history or prehistory.

In addition to these four criteria for evaluation of a property's significance, several "criteria considerations" are also described under 36 CFR § 60.4. The purpose of these considerations is to allow flexibility in the NRHP evaluation and nomination

process. Listed below is a description of properties typically not eligible for the NRHP, followed by exceptions to the rule (National Park Service 1997:25):

> Ordinarily cemeteries, birthplaces, or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:
>
> - A religious property deriving primary significance from architectural or artistic distinction or historical importance; or
> - A building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or
> - A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building directly associated with his productive life; or
> - A cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or

- A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or
- A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or
- A property achieving significance within the past 50 years if it is of exceptional importance.

In addition to significance, a property must possess “integrity” to be eligible for the NRHP. Integrity is the ability of a property to convey its significance; to reveal to the viewer the reason for its inclusion in the NRHP. Integrity is a somewhat subjective quality, but must be judged based on how the property’s physical features relate to its significance. Seven aspects are used to define integrity. Some, if not all, should be present in a property for it to retain its historic integrity: location, design, setting, materials, workmanship, feeling, and association. These concepts are defined as follows:

- Location: the place where the historic property was constructed or the place where the historic event occurred. The relationship between a property and its location is important to conveying the sense of historic events and persons and to understanding why the property

was created or why the event occurred. Moved properties are usually not considered eligible; see Criteria Considerations for exceptions.

- Design: the combination of elements that create the form, plan, space, structure, and style of a property. Design is the result of conscious decisions made during the original conception and planning of the property and includes elements such as organization of space, proportion, scale, technology, ornamentation, and materials. For districts, design includes the way buildings, sites or structures are related--for example, spatial relationships between major features; visual patterns of a landscape, etc.
- Setting: the physical environment of a historic property. This quality refers to the character of the property's location. It involves how the property is situated and its relationship to surrounding features and open space. Setting can include such features as topography, vegetation, manmade features, and relationships between buildings and other features or open space. For districts, setting is important not only within the boundaries of the property, but also between the property and its surroundings.
- Materials: the physical elements that were combined or deposited during a particular period of time and in particular pattern or configuration to form a historic property. The choice and combination of materials reveal the preferences of the creator(s) and suggest the availability of particular types of materials and technologies. A

property must retain the key exterior materials dating from the period of its historic significance. If rehabilitated, those materials must have been preserved. Recreations are not considered eligible for the National Register.

- Workmanship: the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory. Workmanship is the evidence of artisans' labor and skill in constructing or altering a building, structure, object, or site and may apply to the property as a whole or to individual components. This aspect of integrity provides evidence for the technology of a craft, illustrates the aesthetic principles of a historic or prehistoric period, and reveals individual, local, regional, or national applications of both technological practices and aesthetic principles.
- Feeling: a property's expression of the aesthetic or historic sense of a particular period of time. Feeling results from the presence of physical features that, taken together, convey the property's historic character.
- Association: the direct link between an important historic event or person and a historic property. A property retains association if it is the place where the event or activity occurred and is sufficiently intact to convey that relationship to an observer.

Significance, integrity and treatment are reliably determined only when a property is evaluated from the perspective of its "historic context." Historic context

provides a framework within which the National Register criteria are applied to specific properties or property types. Contexts are developed around typological themes. Common examples might include the following: building use, ownership, associated ethnicity, a historical event or trend, architect, architectural style, building material, and others. Contexts can also be either national in scope (e.g. *Historic Context for Department of Defense Installations, 1790 to 1940*) or statewide (e.g. development of military installations in Texas). The Fort Sam Houston CRM should contact the National Park Service to determine whether a nation-wide historic context has been developed that might apply to the property in question. Similarly, the Texas SHPO may have a statewide context against which the historic relevance of the property can be weighed.

6.3.2.1 Evaluation Procedures

Formal procedures for evaluating a historic property of any type (archeological site, building, structure, property of traditional religious and cultural importance) have been developed in consultation with consulting parties. Procedures are as follows. All evaluation procedures must be completed by a qualified professional who meets the Secretary of the Interior' Standards for Professional Qualifications (see SOP 10):

6.3.2.1.1 Categorize the property

The CRM will determine if the historic property is an archeological site, building, object, structure, district or property of traditional religious and cultural

importance. Based upon this determination, Sections 6.3.2.2 through 6.3.2.4 shall be followed.

6.3.2.1.2 Determine the historic context of the property.

- The CRM shall identify the theme(s), geographical limits, and chronological period that provide a perspective from which to evaluate the property's significance.
- The CRM shall determine how the theme(s) within the context is significant to the history of the local area, the state or the nation. A theme is considered significant if scholarly research indicates that it is important in American history.
- The CRM shall determine if the property type is important in illustrating the historic context. Contexts may be represented by a single property type or by a variety of property types.
- The CRM shall determine how the property illustrates the historic context through specific historic associations, architectural or engineering values, or information potential.
- The CRM shall determine whether the property possesses the physical features necessary to convey the aspect of prehistory or history with which it is associated.

6.3.2.1.3 Determine whether the property is significant under the National Register Criteria

The CRM shall apply the following National Register criteria to the historic property. If the property meets one or more of these criteria and retains integrity, the CRM shall proceed to 6.3.2.1.4. If the property does not meet any of the criteria, the CRM shall determine that the property is not eligible for the National Register and document this determination in the NEPA document for the project. IF the Texas SHPO does not object to the findings that the properties are not eligible during the 30 review period, , all responsibility under this HPC and NHPA is then complete. If the Texas SHPO does object to a determination that the property is not eligible, and this objection cannot be resolved, the determination will be forwarded to the Keeper of the National Register for final and binding determination.

- Criterion A: Event. Under this criterion, a property must be associated with one or more events important in the historic context. To establish significance under this criterion:
    - Determine the nature and origin of the property;
    - Identify the historic context with which it is associated, and
    - Evaluate the property's history to determine whether it is associated with the historic context in any important way.
- Criterion B: Person. This criterion applies to properties associated with individuals whose activities are demonstrably important within a local, state, or national context. The property must

illustrate the person's achievement. To determine a property's significance under this criterion:

  - Determine the importance of the individual.
  - Ascertain the length and nature of the person's association with the property and determine if there are other properties associated with the individual.

- Criterion C: Design/Construction. This criterion applies to properties significant for their physical design or construction, including such elements as architecture, landscape architecture, engineering, and artwork. The property, to qualify must:
  - Embody distinctive characteristics of a type, period, or method of construction;
  - Represent the work of a master;
  - Possess high artistic value; or
  - Represent a significant and distinguishable entity whose components may lack individual distinction.
- Criterion D: Information Potential. Properties may be eligible for the National Register if they have yielded, or may be likely to yield, information important to prehistory or history. This criterion commonly applies to archeological sites but can also apply to buildings and structures if they contain important information

6.3.2.1.4 Determine if the property represents a type usually excluded from the National Register, and if so, meets any of the Criteria Considerations

Before examining the Criteria Considerations, the CRM shall determine if the property meets one or more of the four Criteria for Evaluation (6.3.2.1.3) and retains integrity.

- If the property meets one or more of the four Criteria for Evaluation and has integrity, determine if the property is of a type that is usually excluded from the National Register. If it does not meet one of these types, proceed to 6.3.2.3.5.
- If the property is a type cited in the Criteria Considerations, the CRM must determine if the property meets the special requirements stipulated for that type in the Criteria Considerations. If so, the CRM shall proceed to 6.3.2.3.5. If the property does not meet the requirements, the CRM shall determine that the property is not eligible for the National Register, document that determination in the NEPA document for the project, and if the Texas SHPO does not object to the determination within the 30-day NEPA review period, all responsibilities under this HPC and NHPA are complete.

6.3.2.1.5 Determine whether the property retains integrity of location, design, setting, workmanship, materials, feeling and association.

Evaluation of integrity can be subjective but must be grounded in an understanding of a property's physical features and how they relate to its significance. The CRM shall access integrity as follows:

- The CRM will define the essential physical features that must be present for a property to represent its significance. Although not all the historic physical features need to be present, those that convey its historic identity are necessary, including those that define why and when the property was significant. Under Criteria A and B, the property must retain those features that made up its character or appearance during the period of its association with the important event, historical pattern, or person(s). Under Criterion C, the property must retain most of the physical features that constitute that style or technique. Under Criterion D, integrity depends on the data requirements defined in the research design. The significant data contained in the property must remain sufficiently intact to yield the expected important information under appropriate methodologies.
- The CRM will determine whether the essential physical features are visible enough to convey their significance. The essential physical features must not be covered by modern construction or otherwise concealed. Archeological sites are an exception to this qualification.

- The CRM will determine whether the property needs to be compared with similar properties. A comparison may help determine what physical features are essential to properties of that type.
- The CRM will determine, based on the significance and essential physical features, which aspects of integrity are particularly vital to the property being evaluated and if they are present. For Criterion A and B, the presence of all seven aspects of integrity is the ideal; however, integrity of design and workmanship may not be as important or relevant. Under Criterion C, a property must have integrity of design, workmanship, and materials. Location and setting are important for those properties whose design is a reflection of their immediate environment. For Criterion D, setting and feeling will probably not apply unless the property is of traditional religious and cultural significance to Tribes; location, design, materials, and possibly workmanship should be considered.

If the CRM determines that a property meets one or more of the four Criteria for Evaluation, integrity must be evaluated. If, upon evaluation, the CRM determines that the property retains integrity, the property shall be determined eligible for the National Register, and that decision will be documented in the NEPA documentation for the project and the CRM shall continue with SOP 4. If the

CRM determines that the property does not retain integrity, the CRM will determine that the property is not eligible for the National Register. This determination shall be documented in the NEPA documentation, and if the Texas SHPO does not object to the determinations during the 30-day public review period for the project, the responsibilities under this HPC and NHPA are complete. If there is an objection regarding eligibility of a property that cannot be resolved between the CRM and the Texas SHPO, that determination will be forwarded to the Keeper of the National Register for a final and binding determination.

6.3.2.2 Data Collection – Archeological Sites

The goal of archeological inventory for evaluation is to establish that a property contains important information. Appropriate techniques to satisfy the goal depend on site location, condition, and the applicable research questions. The magnitude of investigation will depend on the site type, size and complexity. Field excavation of archeological sites for purposes of evaluation will follow Texas guidelines (need reference). All field supervisors must meet the Secretary of Interior's Professional Qualification Standards.

The following procedures will be used during the evaluation of prehistoric and historic archeological sites.

6.3.2.2.1 Pre-field Preparation

The CRM will provide field supervisors with the necessary background data to evaluate the archeological site(s). Background data shall include but not be limited to: the results of the identification inventory during which the site was identified; the research design developed in coordination with the field supervisors and the CRM for the evaluation project; applicable historic contexts; results of evaluations or determinations of eligibility of similar or nearby sites; and environmental information (soils, geomorphology, known disturbances, topography, vegetation, etc.). If appropriate, field supervisors should be made aware of any utility lines, fiber optic cables and/or gas pipelines that might be present near any area where excavation may take place. Standardized field inventory forms for site and inventory recordation should be provided.

Need to develop appropriate forms for inclusion in an appendix.

6.3.2.2.2 Field Methodology

No single method of field investigation is appropriate for all sites and usually a combination of techniques will yield the data necessary for complete evaluation. A method is acceptable if it can provide data on site size, date of the deposits, site structure and integrity. Methods may include the following:

- Mapping: Maps should include topographic and environmental features as well as location of surface finds, positive shovel probes, cultural features and excavation units.

- Surface collection: All surface collection must maintain horizontal spatial control. If GPS is available, the locations of debris, tools or clusters may be logged as well as the perimeter of the site area. If GPS is unavailable, artifacts should be flagged and recorded. Surface collection is most appropriate for plowed fields or sites with very high ground-surface exposure. It should not be the only technique utilized for site evaluation.
- Shovel probe: This technique is appropriate for areas that are obscured by vegetation or where boundary clarification is necessary. It may be used as part of a sampling strategy or to assist in boundary definition, but never as the sole means of testing.
- Test excavation: Test excavation units sample the site area for subsurface features and provide assessments of site integrity and information potential. Units are excavated in either natural or arbitrary levels. This technique will be the most likely to result in information related to site date, cultural affiliation, site function, degree of preservation of organic remains, the presence of cultural features and/or activity areas, and disturbances.

- Removal of plow zone: This method will allow for examination of a greater percentage of the site area in less time. The plow zone should be removed to just above its base and the remainder removed

by skim shovel. Mapping, surface collection and any sampling should occur prior to removal of the plow zone.

- Remote sensing: Methods in this category include aerial photo interpretation (defines site setting, site limits, internal site structure); ground-penetrating radar or resistivity and conductivity.

Test excavations and removal of the plow zone should be commensurate with the scope of the evaluations project. The CRM will ensures that the investigators are not proceeding to the level of formal excavation, but rather only gathering sufficient information to make a determination of eligibility to the National Register of Historic Places.

6.3.2.2.3 Analysis and Interpretation

All collected materials should be cleaned, labeled, catalogued and analyzed. Analysis includes the following:

- Description of all artifacts by type, including provenience, measurements and quantity
- Description of how dates for the site were obtained
- Description of diagnostic materials that includes type, date and photographs
- Description of features including content, plan views and profiles

- Description of the soil matrix, horizons, disturbances, and site formation processes
- Description and interpretation of the spatial relationships of features and artifact concentrations within the site
- Description of methodology for analysis of any paleo-ecological data collected from the site
- Discussion of how the site information fits into the larger context of regional synthesis
- Recommendations for further data recovery, and the value of conducting further data recovery

6.3.2.2.4 Reporting

All evaluations will be documented in NEPA documentation prepared for projects. In addition, the annual report on HPC implementation will include information on selected recommendations for sites evaluated during the previous year.

6.3.2.3 Data Collection – Buildings and Structures

This portion of the SOP addresses issues that are unique to data collection for buildings and structures. The data collected will facilitate formal procedures for evaluation discussed in 6.3.2.1 above.

6.3.2.3.1 Field Procedures

- Archival Research: The goal of archival research is to collect information that will assist in determining the historic context a property is associated with and whether the property is significant within its historic context with regard to the National Register criteria. This body of data must conclusively associate the building or structure with an event or person under Criteria A or B or with distinctive architectural elements, the work of a master, or high artistic value under Criterion C. Sources that may be consulted include:
    - historic and current maps
    - historic photographs
    - building drawings
    - research files related to the building or Fort Sam Houston that are archived at the State Historic Preservation Office
    - Real Property records
    - City of San Antonio
    - Public Libraries
    - Bexar County Historical Commission
    - San Antonio Conservation Society
    - Institute of Texan Cultures
    - National Archives (if context is national)

- Field Documentation. The purpose of field documentation is to record the building or structure as it exists today and will provide comparative information for assessment of integrity, its current condition, and locational setting. Field documentation includes the following activities:

    - Photography. Photographs should capture every façade (front, rear, side elevations plus obliques). Sensitive buildings (ammunition depots, etc.) will not be photographed. [Researchers should brief the Public Affairs Office and Provost Marshall Office prior to photographing installation resources, and if necessary inform any residents of military housing areas by official letter that summarizes the project, obtains their permission, and coordinates the photographic documentation.] Structures, because of their simplicity, usually require a single photograph. Rectangular buildings require two, diagonally from opposite corners of the building. Complex buildings require more. Additional photos are necessary for architectural detail

- Recordation. The following information should be recorded in notes from field observations. A form for standardized collection of field data is desirable.
  - Architectural style
  - Plan/footprint of building
  - Number of stories
  - Roof type(s)
  - Roof material(s)
  - Foundation material(s)
  - Wall material(s)
  - Type and location of doors
  - Type and location of windows
  - Architectural details
  - Condition of resource
- Modifications to Building/Structure. Real Property records dates and brief descriptions of government building modifications such as rehabilitations, window replacement, and additions.

6.3.2.4 Data Collection – Properties of Traditional Religious and Cultural Importance

This portion of the SOP addresses procedures that are specific to data collection for properties of traditional religious and cultural importance.

6.3.2.4.1 Identify Property

The CRM will ensure that the entity under consideration is a “historic property”. The National Register does not include the traditional religious or cultural practices themselves, but rather the tangible property. The relationship between the beliefs and the property must be considered however, because the beliefs or practices may give the property its significance. Although construction by human beings is a necessary attribute of buildings and structures, it is not a requirement for sites, districts or objects. Sites, districts and objects may possess historic, cultural or archeological value and may be classified as properties even though there may be no physical evidence that an event or activity occurred there. When there is no observable evidence of human activity, documentary and/or oral evidence must be carefully assessed.

6.3.2.4.2 Consider Integrity

- The CRM will determine, in consultation with Tribal officials if the property has an integral relationship to traditional, religious and cultural beliefs or practices and/or if the property is important to the transmission of the beliefs or practices.
- The CRM will determine, in consultation with Tribal officials, if the condition of the property conveys the relationship to traditional, religious and cultural beliefs or practices. In addition, it should be

considered if any physical alterations have resulted in a loss of integrity. Integrity should be considered from the eyes of the practitioners. It is possible for property modifications to be accommodated into the practices.

6.3.3 Review of Determinations of Eligibility

Determinations of eligibility will be documented in the NEPA documentation for projects. These documents, which are available for 30-day public review, will be the mechanism by which consulting parties will, if desired, review determinations of eligibility. In addition, selected determinations made during the previous year may be discussed at the annual review and monitoring meeting.

6.3.4 Assessing Effects

If there are no historic properties located with the APE, this will be documented in through the NEPA process, and there will be no further requirements under this HPC and the NHPA. If it is determined that eligible historic properties are located within the APE, a determination of the effects of the undertaking on those properties will be made.

The CRM will determine if the undertaking will cause any alteration to the characteristics of the property that make it eligible for the National Register. If there will be no effects to any of the historic properties, that decision will be documented through the NEPA process, and there will be no further

requirements under the HPC. A no historic properties affected determination may be made when:

- the undertaking's effects do not alter, directly or indirectly, any of the characteristics of a historic property that qualify it for inclusion in the National Register, in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association
- the undertaking is modified or conditions are imposed, such as the subsequent review of plans for rehabilitation by the CRM to ensure consistency with the Secretary of the Interior's *Standards for the Treatment of Historic Properties* (36 CFR 68) and applicable guidelines, to avoid adverse effects. http://www2.cr.nps.gov/tps/secstan1.htm

If there are effects, the CRM will proceed to SOP 4: Assessing Adverse Effects.

6.4 SOP 4: Assessing Adverse Effects

Note: The SOPs presented here are intended only to initiate discussion on the HPC. The content of the SOPs in the final HPC will be the result of consultation on development of the HPC with consulting parties.

The CRM is responsible for determining if the effects to the historic properties will alter, directly or indirectly, any of the characteristics of the historic properties that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling or association.

All assessment work will be performed by a qualified professional who meets the Secretary of the Interior's Professional Qualification Standards at 36 CFR 61, Appendix A. If the Fort Sam Houston CRM does not meet these qualifications or have the expertise on staff to meet them, qualified assistance must be obtained IAW SOP 10.

6.4.1 Determine Adverse Effects

Using the essential physical features that must be present for a property to represent its significance (6.3.2.1.5), the CRM will determine possible adverse effects, including those reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

6.4.2 Examples of Adverse Effects

Examples include but are not limited to:

- Physical destruction of or damage to all or part of the property;
- Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary's standards for the treatment of historic properties (36 CFR part 68) and applicable guidelines;
- Removal of the property from its historic location;
- Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;
- Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features;
- Neglect of a architectural property which causes its deterioration (except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe) and
- Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

6.4.3 Finding of No Adverse Effect

If it is determined that the undertaking will have no adverse effect on historic properties, that decision will be documented in the NEPA documentation prepared for the project, and there will be no further requirements under the HPC. These determinations will be available for review during the annual review meeting if requested.

If an adverse effect is found, the CRM will proceed to SOP 5: Applying Best Management Practices and/or SOP 6: Alternatives Review.

6.5 SOP 5: Applying Best Management Practices

Note: The SOPs presented here are intended only to initiate discussion on the HPC. The content of the SOPs in the final HPC will be the result of consultation on development of the HPC with consulting parties.

This SOP provides for the consideration and application of historic preservation management practices with emphasis on avoiding adverse effects and meeting identified HPC preservation goals. When dealing with undertakings affecting historic properties, the CRM will strive to avoid adverse effects by following the SOP steps below. When these best management practices cannot be followed, the CRM will proceed to SOP 6: Alternatives Review

6.5.1. Archeological sites and properties of traditional, religious and cultural importance.

1. When possible, projects will be designed with alternate locations so that conflicts with significant archeological sites and properties of traditional religious and cultural importance can be avoided without project delay.
2. When proposed undertakings are determined to have a potential effect on archeological sites, Fort Sam Houston will, to the extent feasible, avoid the adverse effect by modifying the project design or project location so that the site is not impacted.
3. Sites located in areas where physical damage from erosion, vandalism, or exposure to the environment is likely will receive

protective measures and periodic monitoring by the Cultural Resource office at FSH .

FSH needs to develop internal monitoring documentation, schedule, and requirements.

6.5.2. Historic Buildings, Structures, and Objects

1. To the extent feasible , repair, restoration, and rehabilitation will, follow the Secretary of Interior's Standards for the Treatment of Historic Properties.
2. As a matter of policy and when monetarily feasible, Fort Sam Houston will adapt historic buildings for reuse rather than demolishing or mothballing.
3. Historic buildings will be inspected annually for maintenance problems and signs of deterioration, in accordance with the Maintenance Manual to be developed. (Guidelines for this will be included in the Maintenance manual to be developed
4. New construction will follow the existing Installation Design Guidelines and existing Land Use plan.

If the CRM is unable to apply the best management practices to avoid adverse effects, it will be documented through the NEPA process, and the CRM shall proceed with SOP 6.

6.6 SOP 6: Alternatives Review

Note: The SOPs presented here are intended only to initiate discussion on the HPC. The content of the SOPs in the final HPC will be the result of consultation on development of the HPC with consulting parties.

Fort Sam Houston will avoid adverse effects through the application of best management practices. When best management practices cannot avoid adversely affecting a historic property, a thorough review of alternative will take place prior to the application of any measure to mitigate the adverse effects. According to Section 1.5 of the AAP, adverse effects on a historic property are:

> Those effects of an undertaking that may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion on the National Register of Historic Places in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling or association. The criteria of adverse effect also require consideration of all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

SOP 6: Alternatives Review

6.6.1 Review of Project Alternatives

If the CRM determines that an activity will have an adverse effect (SOP 4) on historic properties, this will be documented in the NEPA document, and the Fort Sam Houston CRM will conduct a review of project alternatives in an effort to find a feasible alternative that would avoid the impacts. When the historic property is a building, and the project involves demolition, the evaluation of alternatives will include the calculation of the cost of alternatives (see 6.6.2). The NEPA alternatives review may be leveraged for the historic properties alternatives review, if consideration is given to the historic values of the properties in the NEPA document. Alternatives considered may include but will not be limited to the following measures:

1. Avoidance. This project alternative provides for avoidance of adverse impacts altogether. This is accomplished by not proceeding with the project or that part of the project that will have the impact, or by relocating a project or features of a project to avoid impacts to historic properties. Prioritized alternative locations may have been identified through the NEPA process, and would provide options with minimal delays.
2. Minimize the impact by limiting the degree or magnitude of the action and its implementation. This alternative seeks to limit direct construction impacts, to temporarily protect a property until permanent treatments can

be applied, and/or to control the impacts through monitoring and oversight.

3. Repair, rehabilitate or restore the affected environment: In this alternative, a project that once had the potential to damage a historic property is redesigned so that appropriate rehabilitation standards are applied.
4. Adaptive reuse: Section 111 of the NHPA requires that agencies consider adaptive re-use if a historic building cannot be used for its original purpose.
5. Reduce or eliminate the impact over time by preservation and maintenance operations during the life of the action.
6. Move the property. This is not a favored option; however, in some instances it may be the best way to preserve a property.
7. Transfer the property. If this alternative is pursued, preservation covenants that provide for the property's long-term preservation can be attached to the property.
8. Mothballing: In this option, a building is sealed from the elements to temporarily protect it from the weather and secure it from vandalism. Procedures for properly mothballing a building include the following:

    a. Document the architectural and historical significance of the building.
    b. Prepare a condition assessment of the building.

c. Structurally stabilize the building, based on a professional condition assessment.

d. Exterminate or control pests, including termites and rodents.

e. Protect the exterior from moisture penetration.

f. Secure the building and its component features to reduce vandalism or break-ins.

g. Provide adequate ventilation to the interior

h. Secure or modify utilities and mechanical systems.

i. Develop and implement a maintenance and monitoring plan for protection.

9. Monitoring during the life of the project: Monitoring a project may allow Fort Sam Houston to take appropriate actions to prevent and correct impacts as they occur.

6.6.2 Economic Analysis for Historic Building Demolition and Management

The economic analysis procedures discussed here are designed to assist Fort Sam Houston personnel in making valid assessments for the above referenced actions.

Elements of a Cost Data Analysis:

1. Cost Considerations

a. Size. The size of the unit is directly proportional to the maintenance and repair cost necessary to sustain the condition of the unit and prevent deterioration. The larger the unit (more roof area, square feet of walls and floors), the more maintenance and utilities funding required.

b. Age. Older units, although built to last (brick walls, tile or slate roofs), also often incur additional repair costs due to lead-based paint and asbestos hazards. They may be in the age range where their building components are failing and need replacement (roof systems, water and sanitary lines and electrical wiring).

c. Building Materials. Many building materials used on older structures are of higher quality than contemporary materials and cost more per unit of measure. Therefore, the first-time cost of repair or replacement is much higher than on a more modern building. However, the overall life of the original material may be many times more than the life of contemporary building materials. Over the life of the building component, the more expensive first time repair costs of historic structures may be more cost effective.

d. Cost Per Unit. Often, due to the large size of older units, the average yearly cost to maintain and repair them units is 2 to 2.5 times the cost for smaller, modern units. These costs do not include infrastructure repair costs (roads, utility lines, etc.). Costs per square foot are about equal for older and newer buildings, but the large size of older units equates to greater cost per unit.

e. Costs per Square Foot. When comparing specific unit costs, the tendency of older units to be larger than their contemporary counterparts may account for differing ratios between the costs per unit and the per square foot costs. Cost per square foot are usually similar between older and newer units.

f. Utility Costs. Utility costs include electricity, gas, water, and sewer. Older units cost more than contemporary units based principally on size. If all of the electrical, plumbing and HVAC systems were removed, they should be replaced at 100%. Code would probably also require the installation of a sprinkler system for fire protection, and any new use would require modern communication systems. All interior finishes would also likely be refreshed during renovation.

g. Compliance Costs. There are certain costs associated with using and maintaining historic buildings that are required by law or compliance agreement. While often figured as a variable historic preservation cost, these costs are required by law for all buildings regardless of historic status:

i. Repairing or replacing building components containing hazardous materials such as lead based paint and asbestos can increase the repair costs significantly. These costs are unavoidable since they are required by Title X of the Residential Lead Based Paint Hazard Reduction Act.

ii. The disposal cost for hazardous materials is higher than that of other building materials. Buildings frequently contain lead-based paint and asbestos, considerations that must be addressed in demolition as well as in continued use of buildings.

2. Cost Data Conclusions. The operation and maintenance cost for an older unit is on average over twice the cost of a modern unit. Most of this additional cost can be attributed to the larger sizes of

older units. The requirement to abate lead-based paint adds significantly to the cost of any repair work. The use of historically appropriate materials increases the cost; however, this can be offset by the longer life of the materials used.

The US Army Environmental Center has developed the Layaway Economic Analysis Model, which may be used by Fort Sam Houston to perform the economic analysis.

The Layaway Economic Analysis (LEA) model for Historic Buildings is a computer software program developed to assist the user in determining costs for demolition, layaway, and caretaker maintenance of historic structures. The program is designed to assist Army decision-makers in determining the best course of action for handling excess historic facilities. The LEA provides an estimate of the relative costs of three alternatives: layaway and reactivation if needed in the future; demolition and reconstruction if needed in the future; and continued use with renovation to a satisfactory condition. Cost adjustments include geographical location, climate, inflation, and local cost factors.
The basic LEA report provides the summary costs per square foot of the activities associated with demolishing, laying away, replacing, renovating, and using buildings.

The LEA produces cost estimates from descriptions of the buildings and their conditions. Without an on-site inspection and a detailed design for renovation, only a “ballpark” estimate of costs is possible. The LEA program provides such estimates for Army facilities using standard cost data from recognized sources, contained within the software program in embedded databases.

6.6.3 Documentation of Alternative Selected

The alternatives considered will be documented through the NEPA process for the project, and will include a summary of all alternatives, the one selected, and will document the decision for choosing that alternative. If the alternative selected will have an adverse affect on historic properties (SOP 4), the CRM will proceed to SOP 7: Treatment of Adverse Effects.

6.7 SOP 7: Treatment of Adverse Effects

Note: The SOPs presented here are intended only to initiate discussion on the HPC. The content of the SOPs in the final HPC will be the result of consultation on development of the HPC with consulting parties.

Treatment of adverse effects may be handled through the development of standardized treatments for most archeological and historic building mitigation. These standardized treatments should satisfy Fort Sam Houston's needs for most mitigation projects, except perhaps for those very complex projects or extremely significant historic properties where specialized measures may be needed. The following considerations are presented for the mitigation of both archeological sites and historic buildings.

All treatment measures will be performed by a qualified professional who meets the Secretary of the Interior's Professional Qualification Standards at 36 CFR 61, Appendix A. If the Fort Sam Houston CRM does not meet these qualifications or have the expertise on staff to meet them, qualified assistance must be obtained IAW SOP 10.

6.7.1 General Mitigation Procedures

The Fort Sam Houston installation commander will determine, based on a comparison of cost and value gained as prepared by the CRM, if mitigation is an option, or if it is not in the best public interest or is not financially or otherwise feasible. This decision will be documented through the NEPA process for the

project for a 30-day public review. If mitigation is chosen, the CRM will follow the guidelines below. If the installation commander decides mitigation is not feasible, the CRM will proceed to SOP 8: Documenting Acceptable Loss.

Additional standard mitigation measures should be developed in consultation with FSH and the consulting parties, specifically developing measures that inform the public and promote heritage tourism

6.7.2 Mitigation Measures for Archeological Sites

When an undertaking will have an adverse effect on an archeological site that is either listed in or eligible for listing in the National Register, and the recovery of significant information is proposed as a mitigation measure for the effect, the Fort Sam Houston CRM will consider the following issues:

1. The archeological site should be significant and of value chiefly for the information on prehistory or history it is likely to yield through archeological, historical, and scientific methods of information recovery, including archeological excavation.

2. Does the site contain or is likely to contain human remains, associated or unassociated funerary objects, sacred objects, or items of cultural patrimony as those terms are defined by the Native American Graves Protection and Repatriation Act (25 U.S.C. 3001)?

3. Does the site have significance as property of traditional religious and cultural importance to a Federally-recognized Indian Tribe?

4. The Fort Sam Houston CRM, in consultation with an archeologist who meets the Secretary of the Interior's Standards for Professional Qualifications, will prepare a data recovery plan that is consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties, the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (1983), and the Advisory Council on Historic Preservation's Treatment of Archeological Properties: A Handbook (1980). The plan will specify:
    a. the results of previous research relevant to the project;
    b. research problems or questions to be addressed with an explanation of their relevance and importance;
    c. the field and laboratory analysis methods to be used with a justification of their cost-effectiveness and how they apply to this particular property and these research needs;
    d. the methods to be used in artifact, data, and other records management;
    e. explicit provisions for disseminating the research findings to professional peers in a timely manner; preferred dissemination is through publication in a professional journal.
    f. arrangements for presenting what has been found and learned to the public, focusing particularly on the community or communities that may have interests in the results;

g. the curation of recovered materials and records resulting from the data recovery in accordance with 36 CFR part 79 (except in the case of unexpected discoveries that may need to be considered for repatriation pursuant to NAGPRA); and

h. procedures for evaluating and treating unexpected discoveries of historic properties or Native American remains during the course of the project, including necessary consultation with other parties. In the case of sites found to have NAGPRA cultural items and remains, the consultation procedures under NAGPRA should occur.

5. Fort Sam Houston will ensure that the data recovery plan is developed and will be implemented by or under the direct supervision of a person, or persons, meeting at a minimum, the Secretary of the Interior's Professional Qualifications Standards (48 FR 44738-44739). The data recovery plan will be provided to the Texas SHPO for review 30 days before data recovery activities are begun. The SHPO and other consulting parties may participate as outside monitors of data recovery projects.

6. Fort Sam Houston will ensure that there are no unresolved issues concerning the recovery of significant information with any Indian tribe

that may attach religious and cultural significance to the affected property.

6.7.3 Mitigation Procedures Historic Buildings and Structures

1. Under Section 106 of the NHPA, federal agencies may be required to mitigate adverse effects to historic properties that are on or eligible for the National Register. The CRM will determine the type of mitigation to be carried out based on the significance and character-defining elements of the property, and provide documentation of that decision through the NEPA document for the project for a 30-day public review. When properties are located within the National Historic Landmark District, additional parties must be notified of any actions in accordance with SOP 13: National Historic Landmarks

a. Contributing properties within the existing National Historic Landmark District, and those properties that are individually eligible for the National Register will be documented to HABS/HAER standard 1 when the adverse effect is caused by demolition Additional materials suitable for education purposes will be developed to provide the general public with an understanding of the property's place in the history of Fort Sam Houston and Texas.

b. If feasible, significant architectural features will be salvaged for reuse, and materials prepared for educational use, interpretation, etc.

c. Other National Register-eligible properties will be documented with comprehensive photographs and a written history of the property when the adverse effect is caused by demolition.

d. When the adverse effect is caused by substantial alteration, Fort Sam Houston will strive to limit changes within public spaces (entrances, hallways, etc.), and will make alterations as sympathetic to the existing structure and environment as possible.

2. Transfer, Sale or Lease of Historic Properties

To ensure the continued preservation of any property's significant historic features, the CRM will include adequate restrictions or conditions in those documents that provide for the transfer, lease, or sale of such historic property to a non-Federal party. All covenants and restrictions will be developed in consultation with Fort Sam Houston real estate and counsel staff to ensure legal enforceability. Restrictions and conditions included in transfer documents will:

- Encumber title to the property with a clear and enforceable preservation easement or other covenant;
- Apply to those aspects of the property that make it eligible for inclusion in the National Register;

- Designate a person who has agreed to hold the covenant (covenantee); and
- Be in perpetuity.

The CRM will attempt to market the property to local organizations for educational or public service use before searching other markets..

Under the Residential Communities Initiative, Fort Sam Houston will select a developer/partner who will participate with Fort Sam Houston to prepare and finalize a Community Development Management Plan (CDMP) and any necessary agreements (Development Agreement and Ground Lease?) to implement the privatization of current and future family housing assets at Fort Sam Houston which may result in the transfer of a long-term interest in the construction, demolition, renovation, rehabilitation, operation, and maintenance of housing and other ancillary facilities at Fort Sam Houston “largely” independent of direct government control but intended for the use of soldiers and their families. The CRM will ensure that the RCI contract includes all provisions necessary to comply with the HPC for the management of any historic properties affected by the RCI process.

6.7.4 Documentation of Mitigation Treatment

When mitigation is used to treat adverse effects, the mitigation measure used will be documented through the NEPA process for the project for a 30-day public

review before mitigation measures are begun. Final copies of all mitigation reports and documents will be provided to the TX SHPO and other consulting parties as requested, and will be maintained at Fort Sam Houston. Once the mitigation measure has been completed and documented, Fort Sam Houston has no further requirements under the HPC.

6.8 SOP 8: Documenting Acceptable Loss

Note: The SOPs presented here are intended only to initiate discussion on the HPC. The content of the SOPs in the final HPC will be the result of consultation on development of the HPC with consulting parties.

After having considered all possible alternatives and measures that would mitigate the adverse effects of the undertaking on a historic property, Ft. Sam Houston may make a determination to proceed with an undertaking without implementing alternatives or mitigation measures. This is an installation commander decision which must be documented through the NEPA process before being executed.

- The Fort Sam Houston Installation Commander will document the decision via the NEPA process for the project, including a rationale for why best management practices, alternatives to the undertaking or mitigation measures were not appropriate or possible. The documentation must also include a description of the undertaking and all historic properties that will be affected. At a minimum, installations must provide the documentation to the Council, and the consulting parties.
- Fort Sam Houston will not implement the undertaking for 30 days after the date that it provides NEPA documentation to the above parties. The parties may provide comment to the installation regarding its decision within that time. The Installation Commander will consider all comments and respond in writing to the Council and the consulting parties, providing documentation of the decision.

SOP 8: Documenting Acceptable Loss

When these measures have been completed, Fort Sam Houston has no further requirements under the HPC and the NHPA for the project.

6.9 SOP 9: Review and Monitoring

Note: The SOPs presented here are intended only to initiate discussion on the HPC. The content of the SOPs in the final HPC will be the result of consultation on development of the HPC with consulting parties.

There are three primary purposes of the review and monitoring process.

- Fort Sam Houston and its consulting parties will review undertakings that were accomplished during the previous year at an annual meeting to assess HPC compliance. In order to achieve this goal, Fort Sam Houston provides NEPA documents to the consulting parties during the year, which the consulting parties should review (along with any comments they provided to Fort Sam Houston through that process) prior to the meeting.

- One month before the scheduled review meeting, consulting parties will submit their request for additional documentation on specific projects and requests for site visits to project sites. The CRM will provide the requested information at least two weeks before the scheduled review meeting.
- In addition, Fort Sam Houston will identify those programmed undertakings that are scheduled, or will be scheduled for the next fiscal year.
- The third task for these meetings is to review any of the SOPs that may need to have changes made to them in order to accomplish the historic

SOP 9: Review and Monitoring

preservation goals set out in the HPC. SOPs that do not consistently achieve the desired goals should be changed.

- Fort Sam Houston will document the annual review and these will be distributed to consulting parties after the conclusion of the meeting.

6.9.1 Review and Monitoring Schedule

- A review and monitoring meeting will take place with all consulting parties on an annual basis, with the first meeting scheduled for one year from the date of certification of this HPC. The timing of this meeting should be coordinated with Fort Sam Houston's planning schedule, and follow soon after the semi-annual planning meetings. The Fort Sam Houston CRM will be responsible for coordinating meeting times and locations with all consulting parties, and for providing any requested information in advance of the meeting. Since it is unlikely that all consulting parties will have the same interest in the varying resources of the installation, Fort Sam Houston will meet at different times with those consulting parties interested in archeological properties and/or sacred or cultural properties vs. those interested in historic buildings.

Consulting parties to be included in the annual review and monitoring meeting include:

- Texas State Historic Preservation Officer
- Advisory Council on Historic Preservation
- National Park Service (for issues relating to NHL District)
- Mescalero Apache Tribe
- Wichita and Affiliated Tribes
- Tonkawa Tribe
- Comanche Tribe
- Society for the Preservation of Historic Fort Sam Houston
- San Antonio Conservation Society
- City of San Antonio

Each consulting party should provide a preferred point of contact for notification of meetings and NEPA documentation. POC information should include names, addresses, phone numbers, e-mail addresses, and fax numbers.

6.10 SOP 10: Obtaining Technical Assistance

Note: The SOPs presented here are intended only to initiate discussion on the HPC. The content of the SOPs in the final HPC will be the result of consultation on development of the HPC with consulting parties.

This SOP will ensure that all actions to implement the HPC will be taken by individuals who meet professional standards under regulations established by the Secretary of the Interior in accordance with Section 112 (a)(1)(A) of the National Historic Preservation Act. Fort Sam Houston will strive to maintain on-site technical expertise for cultural resources; when not possible, technical expertise will be obtained in accordance with the procedures described below. Fort Sam Houston will ensure that professional standards, as defined in Section 1.5 of the AAP, are met in the conduct of identification, evaluation, and assessment of effects and treatment of historic properties. When the Army requests assistance from Federally-recognized Indian Tribes in the identification, evaluation, assessment of effects and treatment of historic properties of traditional religious and cultural importance, they need not meet the Secretary of the Interior's Professional Qualification Standards.

6.10.1 Identification, Evaluation, Effects Assessment, Alternatives Preparation, and Treatment of Archeological Properties and Historic Buildings and Structure

1. For work associated with historic buildings and structures, Fort Sam Houston will obtain professional technical assistance that meets the Secretary of the Interior's Standards through the U.S. Army Corps of Engineers, Fort Worth District.

2. For work associated with archeological properties, Fort Sam Houston will obtain professional technical assistance that meets the Secretary of the Interior's Standards through the U.S. Army Corps of Engineers, Fort Worth District.

3. The Fort Sam Houston CRM may also contact the Texas SHPO for assistance with the identification and treatment of archeological properties.

6.10.2 Identification, Evaluation, Effects Assessment, and Treatment of Properties of Traditional Religious and Cultural importance to Federally-recognized Indian Tribes

1. Federally-recognized Indian Tribes are uniquely qualified to identify, evaluate, and treat historic properties to which they attach traditional religious and cultural importance on and off Tribal lands.

2. In order to gain the expertise of Federally-recognized Indian Tribes and the SHPO, Fort Sam Houston will develop a cooperative agreement to obtain required technical assistance.

6.11 SOP 11: Consultation for Inadvertent Discoveries

Note: The SOPs presented here are intended only to initiate discussion on the HPC. The content of the SOPs in the final HPC will be the result of consultation on development of the HPC with consulting parties.

This SOP provides an expedited consultation process for dealing with inadvertent discoveries that could affect the preservation of historic properties on an installation.

Inadvertent discoveries typically involve archeological remains rather than historic buildings because archeological sites are usually not readily apparent. While archeological investigation methods are designed to identify material evidence of past cultural activities, it is always possible that deeply buried archeological deposits may remain undetected during the inventory process. This may be partially attributed to the fact that all archeological inventory methods rely on small samples, through surface investigation or shovel testing, to identify locations of past cultural activity. It is always a possibility that archeological remains may come to light during construction and other ground disturbing activities, even in those areas that have been previously inventoried for archeological sites. This SOP for inadvertent discoveries will be coordinated with all other installation staff offices responsible for carrying out ground disturbing activities (public works, trainers, etc.).

1. In the event that archeological deposits are encountered during any construction, excavation or survey activities, work will cease in the area of the discovery.

a. The property will be treated as NHRP eligible and avoided until an eligibility determination is made. Fort Sam Houston will continue to make reasonable efforts to avoid or minimize harm to the property until requirements under the HPC are completed.

b. Within 16 hours of the discovery, the project manager will notify the CRM.

c. The CRM or a professional archeologist will make a field evaluation of the context of the deposit and its probable age and significance, record the findings in writing, and document with appropriate site description and drawings. No photographs will be taken unless it is determined by a qualified archeologist that the discovery does not contain human remains.

d. If disturbance of the deposits is minimal and the excavation can be relocated to avoid the sites, the CRM will file the appropriate site forms in a routine manner.

e. If the excavation cannot be relocated, the CRM will proceed with SOPs 3 through 8

2. If bone is present within the deposit, the CRM will ensure that a qualified professional (such as state police crime lab or coroner personnel) (SOP 10) accompanies him/her to the work site to assist in identification of the materials as human remains. If human remains are present, the CRM will proceed with SOP

7 in the Fort Sam Houston ICRMP for compliance with NAGPRA, AIRFA, and ARPA (Appendix K).

6.12 SOP 12: Force Protection and Emergency Actions

Note: The SOPs presented here are intended only to initiate discussion on the HPC. The content of the SOPs in the final HPC will be the result of consultation on development of the HPC with consulting parties.

There may be times that Fort Sam Houston must respond to disasters or emergencies that affect the operations and missions of the installation. These emergencies can be either natural or in response to situations that result from human events. This may also include those actions necessary to respond to a threat to national security, including short-term mission essential activities for deployable troops and force protection activities.

Activities and actions undertaken in response to force protection requirements, disasters and emergencies can have an adverse effect on historic properties located on the installation. There may be instances when known historic properties will be affected or when undiscovered properties will be affected by activities taking place in areas of the installation that have not been previously inventoried.

As with inadvertent discoveries, force protection and emergency actions require an expedited process for handling historic properties that may be affected by these actions.

Within 48 hours of the decision to implement force protection actions which require expedited measures (determined by the Fort Sam Houston Installation Commander), or formal disaster or emergency declaration by the President, Congress, or Fort Sam Houston Installation Commander, the CRM will determine the necessary course of action to minimize damage to potential and known historic properties If known archeological sites are damaged, the potential for salvage of any archeological data will be coordinated with an archeologist meeting the Secretary of the Interior's Professional Qualifications Standards. Data recovery, if necessary, may include, but is not limited to, any of the following:

1. Where subsurface disturbance over an un-inventoried area has occurred, either as a result of the disaster or the cleanup effort, archeological inventory will be limited to examination of all exposed surfaces.

2. If known archeological site(s) are damaged, but the damage is minor, protective strategies designed to prevent further site degradation will take place.

3. In the event that the damage to archeological site(s) is severe and the site was or may have been eligible for the National Register, a report will be prepared documenting the damage and the potential for salvage of archeological values that cannot

otherwise be conserved. This report will be sent to all consulting parties for notification. If the potential for salvage is high, the CRM will prepare a research design in coordination with qualified professionals, and salvage will proceed when normalcy is restored. If there is little or no potential for salvage, the damage will be documented in photographs, artifacts at the site will be collected and documented, and no further site investigation will take place. Copies of this information will be provided to all consulting parties.

4. If demolition of a National Register-listed or eligible building or structure is necessary due to life safety issues as the result of a disaster or emergency, recordation will be limited to photographs of all exterior surfaces and features. Only those interior features that may be safely accessed may be documented with photographs. Copies of this information will be provided to all consulting parties.
5. If a NR eligible or listed building or structure is damaged, initial repair will be limited to stabilizing it and protecting it from further damage. Rehabilitation will be undertaken at a later date, IAW this HPC when funds are available and normalcy is restored.
6. If a NR eligible or listed building or structure is to be adversely affected by a force protection action, the CRM will determine the

length of time available for mitigation, and proceed with documentation as possible, including but not limited to, 35 mm photography (preferably black and white) and a brief written description and history of the property. There are three levels of photographic documentation that should be considered: minimum, basic, and expanded. The highest level possible, taking time constraints and the type of adverse effect into consideration, should be used.

Minimum Level: At a minimum, two perspective photographs are required to document a building or structure. These include 1) a photograph showing the front and one side of the building and 2) a second photograph showing the rear and the other side of the building. The photographer should ensure that the entire building is visible, including the point where the building meets the ground and the peak of the roof or chimney. The building should occupy about 75 percent of the picture area, leaving the surrounding 25 percent of the frame for visual information about the context of the building. A third photograph showing a detail of materials, craftsmanship, or design is also useful.

Basic Level: The basic level of photographic documentation is taken from the recommendations of the Historic American Buildings

Survey and the Historic American Engineering Record (HABS/HAER).

Exterior Views

A. General view at a distant sufficient to show environmental setting, landscaping and adjacent buildings, if appropriate.

B. Elevation of front façade.

C. Perspective view of the front façade and one side.

D. Perspective view of the rear and the other side.

E. Close up view of the main entrance.

Interior Views

A. A view from the main entrance looking to the interior of the building.

B. Views of the major spaces/rooms including important architectural features such as stairways (for large spaces, take diagonal views from opposite corners).

C. Other significant rooms or features as considered relevant .

This basic level can be expanded based on the nature of the building or structure being photographed. For example, two perspective photographs work best on square or rectangular buildings with four outside walls. A building of more complex shape, with more outside walls, such as a C-shaped building, will require more perspectives to ensure that all of the walls are included in at least one photograph.

Expanded Level: In this level of photography, each side of the property is photographed from the overall view, such as elevation, to detailed views.

Environmental

A. Environmental view of the front and right side (looking at property from front)

B. Environmental view of the rear and right side.

Perspective

C. Perspective view of the front and right side.

D. Perspective view of the rear and right side.

Front Side

E. Elevation of front façade.

F. Elevation or perspective of front entrance.

G. Perspective or elevation views of architectural elements such as porches or windows.

H. Details of materials and/or decoration.

Right Side

I. Elevation of right facade

J. Perspective or elevation views of architectural elements such as windows or porches.

K. Details of materials and/or decoration

Rear

L. Elevation of rear.

M. Perspective or elevation views of architectural elements such as porches or windows.

N. Details of materials, hardware, and/or decoration.

Left Side

O. Elevation of left side.

P. Perspective or elevation views of architectural elements such as porches or windows.

Q. Details of materials, hardware, and/or decoration.

Whatever level of photographic documentation is completed, a photo index will be maintained by the photographer, which lists the photographs in the same sequence in which they were taken. This will be attached to the written description and history of the building, as well as being kept with the photographs and negatives. All of this documentation will be kept on file at Fort Sam Houston, and copies will be provided to the TX SHPO and other consulting parties as requested.

6.13 SOP 13: National Historic Landmarks

Note: The SOPs presented here are intended only to initiate discussion on the HPC. The content of the SOPs in the final HPC will be the result of consultation on development of the HPC with consulting parties.

Properties nominated to the National Register may be considered for potential designation as a National Historic Landmark (NHL). To earn an NHL designation, a property must have the quality of *national* significance and possess *exceptional* value or quality in illustrating or interpreting the heritage of the United States in history, architecture, archaeology, engineering, or culture. The property must also possess a high degree of integrity of location, design, setting, materials, workmanship, feeling and association. Generally, the categories of historic properties are defined the same as for National Register listings (i.e. district, site, building, structure, and/or object), historic contexts are similarly identified, and comparative evaluation is carried out on the same principles.

Because of the higher level of significance of NHLs, agencies are required by Section 110(f) of NHPA to "…the maximum extent possible, undertake such planning and actions as may be necessary to minimize harm to such landmark…" To that end, the FSH CRM will:

- Consider the NHL in the initial design stages of an undertaking; and,
- Design undertakings that, to the maximum extent possible, protects the NHL and those properties designated within the boundary formally designated in the Landmark documentation and also takes into

SOP 13: National Historic Landmarks

consideration the visual and auditory impacts of the undertaking with respect to the designated boundaries.

Fort Sam Houston has a historic district consisting of 669 contributing buildings and 21 contributing structures which has been declared an NHL. Fort Sam Houston will provide the Council, the National Park Service, in additional to all other parties, including the Texas SHPO a reasonable opportunity to comment on undertakings that may affect the NHL. These comments will be solicited through the NEPA review process. The installation will forward all NEPA documentation prepared for or associated with any undertaking that may directly or adversely affect the NHL to the National Park Service, and the Council, and all other parties.

Recommendations and guidance provided by these agencies will be considered in the design of the undertaking. Fort Sam Houston will respond to the comments of the Council and the National Park Service in writing prior to proceeding with the undertaking.

6.14 SOP 14: Shared Public Data

Note: The SOPs presented here are intended only to initiate discussion on the HPC. The content of the SOPs in the final HPC will be the result of consultation on development of the HPC with consulting parties.

Section 106 of the NHPA and NEPA require that Fort Sam Houston make available to consulting parties and the interested public documentation regarding undertakings, their effect on historic properties, and agency decisions with regard to those effects. In addition, the Freedom of Information Act directs government agencies to disclose certain types of records to the public. At the same time, Section 304 of the NHPA and Section 9 of ARPA protect from public disclosure the precise location and nature of historic properties, properties of traditional religious and cultural importance, and sacred sites that are identified pursuant to Executive Order 13007. This SOP identifies the types of data that are available for review by consulting and interested parties and provides for sharing data on historic properties, to the greatest extent practicable, between Fort Sam Houston and its consulting parties and the public.

6.14.1 Categories of Shared Data

Group 1: NEPA Documents and Meeting Information

Draft Environmental Impact Statement (EIS)

EIS

Finding of No Significant Impact (FONSI)

Environmental Assessment (EA)

Environmental Baseline Study (EBS)

Meeting Agenda

Meeting Minutes

Meeting Summaries

Group 2: Historic properties management documents

Archeological Site Reports

Historical Reports

Management Plans

Historic Structures Reports

Building Maintenance Plans

Group 3: Data Documents

Archeological, Historical, and Building Databases

GIS Data

Map Data

6.14.2 Categories of Data Users

The following is a list of individuals or organizations that may have an interest in obtaining data related to Fort Sam Houston historic properties activities:

Data User 1:

Consulting Parties

SHPO

THPO

Native American tribes

Data User 2:

Government and Research organizations:

Other military installations

Local universities

State Historic society

State museums

Installation program managers

City government officials

County museums

Federal agencies (NPS, ACHP, etc.)

Data User 3:

Interested Public

Other ethnically affiliated groups

Interested individuals

Local interest groups

Historical societies

Veterans groups

6.14.3 Protocol for Data Sharing

Data User 1:

- Shall have access to all Group 1 and 2 data records.
- Access shall be by method established during Review and Monitoring meeting (e-mail, mail, library access, etc.)
- No restrictions on site locational data.
- Group 3 data records available for viewing at Fort Sam Houston. Request for viewing data shall be preceded by a two-day e-mail or telephone notice.

Data User 2:

- Shall have access to all Group 1 and 2 data records upon request in writing. Sensitive locational information will be restricted to those with a demonstrable need.
- Data Group 3 records are available on-site only. Requests must be made by appointment.

Data User 3:

- Shall have access to Group 1 data records. No locational data will be provided.
- Group 2 data records will be available at local libraries; no locational data will be provided.
- Group 3 data will be viewable at Fort Sam Houston by special request. No sensitive information will be available. Request must

be made by appointment through the Fort Sam Houston Public Affairs Office (PAO).

Also need to provide protocol for FSH to request information from the SHPO and other consulting parties, such as archeological site information for obtaining site numbers, etc.

6.15 SOP 15: Administrative Remedies

Note: The SOPs presented here are intended only to initiate discussion on the HPC. The content of the SOPs in the final HPC will be the result of consultation on development of the HPC with consulting parties.

6.15.1 Evaluation of Council Determinations

(a) Within 30 days of the Council's final determination to certify or recertify an installation to operate under its HPC, or approve a Major Amendment, a consulting party may object in writing to the Council's determination. The objection must:

(1) Be forwarded to the Council, the installation commander and the MACOM;

(2) Be specifically related to a deficiency in:

(i) Consultation with the consulting party; and/or,

(ii) Consideration of historic properties of importance to that objecting party.

(b) The Council shall review the objection, obtain the installation's views, and within 30 days provide the Council's written determination to both the objecting party and the installation commander.

(c) The Council's written determination shall either:

(1) Validate the Council's previous determination to certify or recertify the HPC, or to approve a Major Amendment;

(2) Allow the installation to continue implementation while resolving objections; or,

(3) Revoke the previous determination and require the installation to review its undertakings in accordance with 36 CFR Part 800.

6.15.2 Evaluation of HPC Implementation

(a) Any time subsequent to Council certification or recertification, if a consulting party believes that an installation has failed to implement its HPC, the consulting party shall first notify the installation commander, in writing, of its objection. The consulting party must provide information and documentation sufficient to set forth the basis for its objection. The installation commander and consulting party shall attempt to resolve the objection informally before proceeding with the formal procedures set forth below.

(b) If a consulting party has raised an objection with the installation commander and the objection has not been resolved informally, the objecting party may elevate its objection to the Council, in writing. The written objection must:

(1) Be forwarded to the Council and the installation commander;

(2) Be specifically related to an installation's failure to implement an identified SOP in the HPC; and,

(3) Describe the objecting party’s efforts to resolve the objection informally at the installation level.

(c) Where the consulting party has objected to a specific undertaking, the installation commander shall, during the 15-day Council review period set forth below, defer that discrete portion of the undertaking which may cause adverse effects to historic properties. This deferral provision will not apply where the

activity at issue is an exempt undertaking under Section 4.5 or where the adverse effects have been documented as acceptable loss under an installation's HPC implementing Section 3.5(f)(1)(vi) of the Army Alternate Procedures.

(d) The Council, within 15 days of receiving the written objection of a consulting party, shall provide a written response to the consulting party and the installation commander, expressing its views, and, if appropriate, making specific recommendations for resolution of the consulting party's objections.

(e) If the Council does not provide its written views within the 15-day review period, the installation commander shall assume that there is no Council objection and proceed with the undertaking.

(f) If the Council does provide its written views within the 15 day review period, the installation commander shall document his or her consideration of the Council's views, provide copies of the documentation to the Council and the objecting consulting party, and proceed with the undertaking.

(g) The Council may also object to an installation's implementation of its HPC, in which case the Council will provide its written views and specific recommendations for resolution to the installation commander for his or her consideration. The installation commander shall document his or her

consideration of the Council's views and provide copies of the documentation to the Council and the consulting parties.

APPENDIX A

Fort Sam Houston Inventory of Historic Properties

APPENDIX B

Camp Bullis Inventory Of Historic Properties

APPENDIX C

List of Fort Sam Houston Cultural Resources Contacts

APPENDIX D - LIST OF ACRONYMNS

AAP	Army Alternate Procedures
ACSIM	Assistant Chief of Staff for Installation Management
AR 200-2	Army Regulation 200-2: Environmental Effects of Army Actions
AR 200-4	Army Regulation 200-4: Cultural Resources Management
APE	Area of Potential Effects
ARPA	Camp Bullis
CLRA	Canyon Lake Recreation Area
CRM	Cultural Resources Manager
DA PAM 200-4	Department of the Army Pamphlet 200-4: Cultural Resources Management
DEP	Director of Environmental Programs
EA	Environmental Assessment
EIS	Environmental Impact Statement
FPO	Federal Preservation Officer
FSH	Fort Sam Houston
HPC	Historic Properties Component (the section 106 portion of an ICRMP)
HQDA	Headquarters, Department of the Army
ICRMP	Integrated Cultural Resources Management Plan
MACOM	Major Command
MOA	Memorandum of Agreement

NAGPRA	The Native American Graves Protection and Repatriation Act
NEPA	The National Environmental Policy Act
NHL	National Historic Landmark
NHPA	The National Historic Preservation Act
PA	Programmatic Agreement
PLS	Planning Level Survey
SHPO	State Historic Preservation Officer
SOP	Standard Operating Procedure
THPO	Tribal Historic Preservation Officer

APPENDIX E – NATIONAL REGISTER BULLETINS

The following bulletins are available through the National Register of Historic Places. These are available online at http://www.nps.gov/nr/bulletins/bulletins.html or may be ordered from the National Register of Historic Places, National Park Service, U.S. Department of the Interior, P.O. Box 37127, Washington, DC 20013-7127.

Bulletin 4: Contribution of Moved Buildings to Historic Districts

Bulletin 6: Application of National Register Criteria: Nomination of Properties Significant for Associations with Living Persons

Bulletin 9: Addendum to "How to Complete National Register Nomination Forms" improvement of documentation for properties nominated to the National Register

Bulletin 12: Definition of National Register Boundaries for Archeological Properties

Bulletin 14: Guidelines for Counting Contributing and Noncontributing Resources for National Register Documentation

Bulletin 15: How to Apply the National Register Criteria for Evaluation

Bulletin 16: Guidelines for Completing National Register of Historic Places Nominations

Bulletin 18: How to Evaluate and Nominate Designed Historic Landscapes

Bulletin 20: Nominating Historic Vessels and Shipwrecks to the National Register of Historic Places

Bulletin 21: How to Establish Boundaries for National Register Properties

Bulletin 22: Guidelines for Evaluating and Nominating Properties That Have Achieved Significance Within the Last Fifty Years

Bulletin 23: How to Improve the Quality of Photos for National Register Nominations

Bulletin 25: Bibliography of Technical Information to Assist in Implementing the Secretary of the Interior Standards for Archeology and Historic Preservation

Bulletin 28: Using the UTM Grid System to Record Historic Sites

Bulletin 29:	Guidelines for Restricting Information About Historic and Prehistoric Resources
Bulletin 30:	Guidelines for Evaluating and Documenting Rural Historic Landscapes
Bulletin 31:	Surveying and Evaluating Vernacular Architecture
Bulletin 32:	Guidelines for Evaluating and Documenting Properties Associated with Significant Persons
Bulletin 35:	National Register Casebook: Examples of Documentation
Bulletin 36:	Guidelines for Evaluating and Registering Historical Archeological Sites and Districts
Bulletin 38:	Guidelines for Evaluating and Documenting Traditional Cultural Properties
Bulletin 39:	Researching a Historic Property
Bulletin 40:	Guidelines for Identifying, Evaluating and Registering America's Historic Battlefields
Bulletin 41:	Guidelines for Evaluating and Registering Cemeteries and Burial Places
	Telling the Stories: Planning Effective Interpretive Programs for Properties Listed in the National Register of Historic Places
	How to Prepare National Historic Landmark Nominations
	Guidelines for Evaluating and Documenting Historic Aviation Properties

APPENDIX F - OTHER REFERENCES

Advisory Council on Historic Preservation

Balancing Historic Preservation Needs with the Operation of Highly Technical or Scientific Facilities, February, 1991.

Section 106 Regulations User's Guide. Recommended Approach for Consultation on Recovery of Significant Information from Archeological Sites. http://www.achp.gov/archguideplain.html.

Identification of Historic Properties: A Decisionmaking Guide for Managers. http://www.achp.gov/idhistpr.html.

DEPARTMENT OF THE ARMY

AR 200-4 Cultural Resources Management. **This regulation establishes Army policy for managing cultural resources to meet legal compliance requirements of Federal historic preservation law.**

DA PAM 200-4 Cultural Resources Management. **This pamphlet provides guidance on the implementation of the Army policy prescribed in AR 200-4**

For Want of a Home: A Historic Context for Wherry and Capehart Military Family Housing. U.S. Army Corps of Engineers, Construction Engineering Reseach Laboratory.

DEPARTMENT OF DEFENSE

DODD 4710.1 Archeological and Historic Resources Management, June 24, 1984.

DODI 4715.3 Environmental Conservation Program, May 3, 1996.

American Indian and Alaska Native Policy, October 20, 1998. William S. Cohen, Secretary of Defense

Coming in from the Cold: Military Heritage in the Cold War. Report on the Department of Defense Legacy Cold War Project.

Native American Affairs and the Department of Defense. Prepared by Donald Mitchell and David Rubenson of the National Defense Research Institute.

Department of the Interior

The Secretary of the Interior's Standards and Guidelines for Federal Agency Historic Preservation Programs Pursuant to the National Historic Preservation Act. **Includes standards and guidelines for agency programs under Section 110 of NHPA. Also includes consultation guidelines (http://www2.cr.nps.gov/pad/sec110.htm)**

Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines. Includes standards and guidelines for preservation planning; identification; evaluation; registration; historical documentation; architectural and engineering documentation; archeological documentation; historic preservation projects; and professional qualification standards for history, archeology, architectural history, architecture, and historic architecture. (http://www.achp.gov/secstnd.html)

The Secretary of the Interior's Standards for Rehabilitation & Illustrated Guidelines for Rehabilitating Historic Buildings

The Secretary of the Interior's Standards for the Treatment of Historic Properties, 1995. Includes Secretary's standards for preservation, rehabilitation, restoration, and reconstruction. (http://www2.cr.nps.gov/tps/secstan2.htm)

The Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation: HABS/HAER Standards.

World War II and the U.S. Army Mobilization Program: A History of 700 and 800 Series Cantonment Construction. U.S Department of the Interior, National Park Service, HABS/HAER. This document, funded by the Legacy Resources Management Program of the Department of Defense, includes the HABS documentation for Camp Edwards, Massachusetts and Fort McCoy, Wisconsin.

APPENDIX G – HABS/HAER DOCUMENTATION STANDARDS

Standard I: Content

1. Requirement: Documentation shall adequately explicate and illustrate what is significant or valuable about the historic building, site, structure or object being documented. The drawings, photographs and other materials that comprise documentation should convey the historic significance of the building, site, structure or object identified in the evaluation process. The historical, architectural, engineering or cultural values of the property together with the purpose of the documentation activity determine the level and methods of documentation. Documentation prepared for submission to the Library of Congress must meet the HABS/HAER Guidelines.

2. Criteria: Documentation shall meet one of the following documentation levels to be considered adequate for inclusion in the HABS/HAER collections:

    a. Documentation Level 1:
        1. Drawings: a full set of measured drawings depicting existing or historic conditions.
        2. Photographs: photographs with large-format negatives of exterior and interior views; photocopies with large-format negatives of select existing drawings or historic views where available.
        3. Written data: history and description.

    b. Documentation Level II:
        1. Drawings: select existing drawings, where available, should be photographed with large-format negatives or photographically reproduced on mylar.
        2. Photographs: photographs with large-format negatives of exterior and interior views, or historic views, where available.
        3. Written data: history and description.

    c. Documentation Level III:
        1. Drawings: sketch plan.
        2. Photographs: photographs with large-format negatives of exterior and interior views.
        3. Written data: architectural data form.

    d. Documentation Level IV: HABS/HAER inventory card (a one-page form that includes written data, a sketched site plan and a 35mm contact print drymounted on the form. The negative with

separate contact sheet and index should be included with the inventory card.

Standard II: Quality

1. Requirement: HABS and HAER documentation shall be prepared accurately from reliable sources with limitations clearly stated to permit independent verification of information. The purpose of documentation is to preserve an accurate record of historic properties that can be used in research and other preservation activities. To serve these purposes, the documentation must include information that permits assessment of its reliability.

2. Criteria: For all levels of documentation, the following quality standards shall be met:

    a. Measured drawings: Measured drawings shall be produced from recorded, accurate measurements. Portions of the building that were not accessible for measurement should not be drawn on the measured drawings but clearly labeled as not accessible or drawn from available construction drawings and other sources and so identified. No part of the measured drawings shall be produced from hypothesis or non-measurement related activities. Documentation Level I measured drawings shall be accompanied by a set of field notebooks in which the measurements were first recorded. Other drawings prepared for Documentation Levels II and III, shall include a statement describing where the original drawings are located.

    b. Large format photographs: Large format photographs shall clearly depict the appearance of the property and areas of significance of the recorded building, site, structure or object. Each view shall be perspective-corrected and fully captioned.

    c. Written history: Written history and description for Documentation Levels I and II shall be based on primary sources to the greatest extent possible. For Levels III and IV, secondary sources may provide adequate information; if not, primary research will be necessary. A frank assessment of the reliability and limitations of sources shall be included. Within the written history, statements shall be footnoted as to their sources, where appropriate. The written data shall include a methodology section specifying name of researcher, date of research, sources searched, and limitations of the project.

Standard III: Materials

1. Requirement: HABS and HAER documentation shall be prepared on materials that are readily reproducible for ease of access; durable for long storage; and in standard sizes for ease of handling. The size and quality of documentation materials are important factors in the preservation of information for future use. Selection of materials should be based on the length of time expected for storage, the anticipated frequency of use and a size convenient for storage.

2. Criteria: For all levels of documentation, the following material standards shall be met:

    a. Measured Drawings:
    Readily reproducible: Ink on translucent material
    Durable: Ink on archivally stable materials.
    Standard Sizes: two sizes: 19 x 24" or 24 x 36"

    b. Large Format Photographs:
    Readily reproducible: Prints shall accompany all negatives
    Durable: Photography must be archivally processed and stored. Negatives are required on safety film only. Resin-coated paper is not accepted. Color photography is not acceptable.
    Standard sizes: Three sizes: 4 x 5", 5 x 7", 8 x 10"

    c. Written History and Description:
    Readily Reproducible: Clean copy for photocopying
    Durable: Archival bond required.
    Standard Sizes: 8 ½ x 11"

    d. Field Records:
    Readily Reproducible: Field notebooks may be photocopied. Photo identification sheet will accompany 35 mm negatives and contact sheets.
    Durable: No requirement
    Standard Sizes: Only requirement is that they can be made to fit into a 9 ½x 12" archival folding file.

Standard IV: Preservation

1. Requirement: HABS and HAER documentation shall be clearly and concisely produced. In order for documentation to be useful for future research, written materials must be legible and understandable, and graphic materials must contain scale information and location references.

2. Criteria: For levels of documentation as indicated below, the following standards for presentation will be used:

    a. Measured Drawings: Level I measured drawings will be lettered mechanically or in a hand printed equivalent style. Adequate dimensions shall be included on all sheets. Level III sketch plans should be neat and orderly.
    b. Large format photographs: Level I photographs shall include duplicate photographs that include a scale. Level II and III photographs shall include, at a minimum, at least one photograph with a scale, usually of the principal facade.
    c. Written history and description: Data shall be typewritten on bond, following accepted rules of grammar.

Note: More detailed guidance on each of the documentation products can be found in *Recording Historic Structures*, ed. John A. Burns (Washington: American Institute of Architects Press, 1989).

APPENDIX H – EVALUATING HISTORIC PROPERTIES

A.3 EVALUATION CONCEPTS

Following is a general discussion of the key concepts that provide the framework for the evaluation process. During evaluation, the significance and integrity of a historic property are assessed, resulting in a determination of the property's eligibility for listing in the National Register of Historic Places (NRHP), i.e. following evaluation the property is either "eligible" or "not eligible." After the key concepts are introduced, procedures for evaluation of all property types are established. The evaluation procedures are primarily a mental process that involve an assessment of the collected data against a set of precise National Register criteria. Consequently, it is assumed that sufficient archival research and field data have been collected prior to application of the criteria to enable the assessment. Collection of field data differs somewhat between archaeological sites, buildings and structures, and properties of traditional religious and cultural importance. Procedures for the collection of field data and a discussion of evaluation issues specific to each property type are presented separately following the evaluation procedures.

Under the National Register criteria for evaluation:

"The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
B. That are associated with the lives of significant persons in our past; or
C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
D. That have yielded or may be likely to yield, information important in history or prehistory.

Criterion A describes properties in which significant historical events have occurred. An example of this would be Ford's Theater in Washington, D.C., where President Lincoln was assassinated. Criterion B describes those properties associated with a prominent person's life. Included under Criterion C are those properties immediately brought to mind when thinking about historic preservation: works by famous architects and conspicuous landmarks, executed in eye-catching styles or with unique construction methods. Criterion D refers to properties that have, or may in the future, reveal important historical information. Properties meeting Criterion D are typically archaeological sites. In general,

cultural resources must be 50 years or older to qualify for the National Register, excepting those of extraordinary significance.

In addition to these four criteria for evaluation of a property's significance, several "criteria considerations" are also described under 36 CFR § 60.4. The purpose of these considerations is to allow flexibility in the NRHP evaluation and nomination process. Listed below is a description of properties typically not eligible for the NRHP, followed by exceptions to the rule (National Park Service 1997:25):

> "Ordinarily cemeteries, birthplaces, or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:
>
> 1. A religious property deriving primary significance from architectural or artistic distinction or historical importance; or
> 2. A building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or
> 3. A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building directly associated with his productive life; or
> 4. A cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or
> 5. A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or
> 6. A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or
> 7. A property achieving significance within the past 50 years if it is of exceptional importance."

In addition to significance, a property must possess "integrity" to be eligible for the NRHP. Integrity is the ability of a property to convey its significance; to reveal to the viewer the reason for its inclusion in the NRHP. Integrity is a somewhat subjective quality, but must be judged based on how the property's physical features relate to its significance. Seven aspects are used to define integrity. Some, if not all, should be present in a property for it to retain its historic integrity: location, design, setting, materials, workmanship, feeling, and association. These concepts are defined as follows:

1. Location: the place where the historic property was constructed or the place where the historic event occurred. The relationship between a property and its location is important to conveying the sense of historic events and persons and to understanding why the property was created or why the event occurred. Moved properties are usually not considered eligible; see Criteria Considerations for exceptions.

2. Design: the combination of elements that create the form, plan, space, structure, and style of a property. Design is the result of conscious decisions made during the original conception and planning of the property and includes elements such as organization of space, proportion, scale, technology, ornamentation, and materials. For districts, design includes the way buildings, sites or structures are related, for example, spatial relationships between major features; visual patterns of a landscape, etc.

3. Setting: the physical environment of a historic property. This quality refers to the character of the property's location. It involves how the property is situated and its relationship to surrounding features and open space. Setting can include such features as topography, vegetation, manmade features, and relationships between buildings and other features or open space. For districts, setting is important not only within the boundaries of the property, but also between the property and its surrounding.

4. Materials: the physical elements that were combined or deposited during a particular period of time and in particular pattern or configuration to form a historic property. The choice and combination of materials reveal the preferences of the creator(s) and suggest the availability of particular types of materials and technologies. A property must retain the key exterior materials dating from the period of its historic significance. If rehabilitated, those materials must have been preserved. Recreations are not considered eligible for the National Register.

5. Workmanship: the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory. Workmanship is the evidence of artisans' labor and skill in constructing or altering a building, structure, object, or site and may apply to the property as a whole or to individual components. This aspect of integrity provides evidence for the technology of a craft, illustrates the aesthetic principles of a historic or prehistoric period, and reveals individual, local, regional, or national applications of both technological practices and aesthetic principles.

6. Feeling: a property's expression of the aesthetic or historic sense of a particular period of time. Feeling results from the presence of physical features that, taken together, convey the property's historic character.

7. Association: the direct link between an important historic event or person and a historic property. A property retains association if it is the place where the event or activity occurred and is sufficiently intact to convey that relationship to an observer.

Significance, integrity and eventual treatment are reliably determined only when a property is evaluated from the perspective of its "historic context." Historic contexts provide a framework within which the National Register criteria are applied to specific properties or property types. Contexts are developed around typological themes. Common examples might include the following: building use (post office, water tower), ownership (Federal government), associated ethnicity (Ogalala Sioux, Swedish-American), a historical event or trend (development of the railroad), architect, architectural style, building material, and others. Contexts can also be either national in scope (e.g. *Historic Context for Department of Defense Installations, 1790 to 1940*) or statewide (e.g. "Federal Military Installations"). The Federal agency should contact the National Park Service to determine whether a nation-wide historic context has been developed that might apply to the property in question. Similarly, the appropriate SHPO may have a statewide context against which the historic relevance of the property can be weighed.

If, for example, an agency is trying to determine the historic significance of an aircraft hanger, then it would be important to determine if—and how many—examples of this building type have been identified and listed in the NRHP. Several hangers might already have been nominated to the NRHP, perhaps even better examples than the one currently in question. If this is the case, then the hanger in question might be considered less significant, because other, better examples have already been identified. Alternatively, historic hangers might be underrepresented in the NRHP. If so, then the significance of the hanger will probably be enhanced. Perhaps several examples of historic aircraft hangers are found in a different state, but not in the agency's home state. This, too, has the potential to augment the property's significance. The historic context will help the agency with these types of considerations. It will identify which types of properties are likely or unlikely candidates for NRHP eligibility, based on nation- or state-wide exigencies. Once again, determining significance for purposes of NHPA-compliance is a function best undertaken by a qualified professional.

B. EVALUATION PROCEDURES – GENERAL

Formal procedures for evaluating a historic property of any type (archaeological site, building, structure, property of traditional religious and cultural importance) are developed in consultation with consulting parties. Procedures are as follows:

1. Research Design. All historic properties evaluation projects should begin with a Research Design that defines the objectives and methods of the evaluation, and identifies the research questions the evaluation project is expected to answer. The Research Design should also suggest the information that needs to be ascertained at a minimum that would enable a determination of site significance. The Research Design, a written document should be included in the final published report that documents the evaluation and its results.

   The research design should be developed for an installation's historic properties evaluation activities in consultation with the consulting parties. The design shall undergo periodic review and modification to take into account the results of subsequent evaluations, revised cultural contexts and new or refined research questions. The review and modification should coincide with the five-year revision of the HPC.

2. Categorize the property (archaeological site, building, object, structure, district).

3. Determine the historic context of the property.

   a. Identify the theme(s), geographical limits, and chronological period that provide a perspective from which to evaluate the property's significance. Examples of themes (also referred to as areas of significance) are: agriculture, architecture, communications, exploration/settlement, military, government, or transportation. A list of themes can be found in the National Register Bulletin (How to Apply the National Register Criteria for Evaluation).
   b. Determine how the theme(s) within the context is significant to the history of the local area, the State or the nation. A theme is considered significant if scholarly research indicates that it is important in American history.
   c. Determine if the property type is important in illustrating the historic context. Contexts may be represented by a single property type or by a variety of property types. A specific County government, for example, may be represented by a single courthouse; agricultural development within the county may be represented by farmhouses, barns, silos, corncribs, and the like.
   d. Determine how the property illustrates the historic context through specific historic associations, architectural or engineering values, or information potential.

e. Determine whether the property possesses the physical features necessary to convey the aspect of prehistory or history with which it is associated.

4. Determine whether the property is significant under the National Register Criteria.

a. Criterion A: Event. Under this criterion, a property must be associated with one or more events important in the historic context. To establish significance under this criterion:

i. Determine the nature and origin of the property;
ii. Identify the historic context with which it is associated, and
iii. Evaluate the property's history to determine whether it is associated with the historic context in any important way.

b. Criterion B: Person. This criterion applies to properties associated with individuals whose activities are demonstrably important within a local, State, or national context. The property must illustrate the person's achievement. To determine a property's significance under this criterion:

i. Determine the importance of the individual.
ii. Ascertain the length and nature of the person's association with the property. Are there other properties associated with the individual?

c. Criterion C: Design/Construction. This criterion applies to properties significant for their physical design or construction, including such elements as architecture, landscape architecture, engineering, and artwork. The property, to qualify must:

i. Embody distinctive characteristics of a type, period, or method of construction;
ii. Represent the work of a master;
iii. Possess high artistic value; or
iv. Represent a significant and distinguishable entity whose components may lack individual distinction.

d. Criterion D: Information Potential. Properties may be eligible for the National Register if they have yielded, or may be likely to yield, information important to prehistory or history. This criterion commonly applies to archaeological sites but can also apply to buildings and structures if they contain important information. In that case, the building or structure itself must have been the principal source of the important information.

5. Determine if the property represents a type usually excluded from the National Register, and if so, meets any of the Criteria Considerations (see discussion on Criteria Considerations in this SOP).

    a. Before examining the Criteria Considerations, make sure the property meets one or more of the four Criteria for Evaluation and possesses integrity.
    b. If the property meets one or more of the four Criteria for Evaluation and has integrity, determine if the property is of a type that is usually excluded from the National Register. If it does not meet one of these types, it does not need to meet any special requirements.
    c. If the property does fit one of these types, it must meet the special requirements stipulated for that type in the Criteria Considerations.

6. Determine whether the property retains integrity of location, design, setting, workmanship, materials, feeling and association. Evaluation of integrity can be subjective but must be grounded in an understanding of a property's physical features and how they relate to its significance. Assessments of integrity proceed as follows:

    a. Define the essential physical features that must be present for a property to represent its significance. Although not all the historic physical features need to be present, those that convey its historic identity are necessary, including those that define why and when the property was significant. Under Criteria A and B, the property must retain those features that made up its character or appearance during the period of its association with the important event, historical pattern, or person(s). Under Criterion C, the property must retain <u>most</u> of the physical features that constitute that style or technique. Under Criterion D, integrity depends on the data requirements defined in the research design. The significant data contained in the property must remain sufficiently intact to yield the expected important information under appropriate methodologies.

    b. Determine whether the essential physical features are visible enough to convey their significance. The <u>essential</u> physical features must not be covered by modern construction or otherwise concealed. Archaeological sites are an exception to this qualification.

c. Determine whether the property needs to be compared with similar properties. A comparison may help determine what physical features are essential to properties of that type. And,

d. Determine, based on the significance and essential physical features, which aspects of integrity are particularly vital to the property being nominated and if they are present. For Criterion A and B, the presence of all seven aspects of integrity are the ideal, however integrity of design and workmanship may not be as important or relevant. A test for integrity is whether a historical contemporary would recognize the property as it exists today. Under Criterion C, a property must have integrity of design, workmanship, and materials. Location and setting are important for those properties whose design is a reflection of their immediate environment. For Criterion D, setting and feeling will probably not apply; location, design, materials, and possibly workmanship should be considered.

EVALUATION – ARCHAEOLOGICAL SITES

The goal of archaeological field survey for evaluation is to establish that a property contains important information. Appropriate techniques to satisfy the goal depend on site location, condition, and the applicable research questions. The magnitude of investigation will depend on the site type, size and complexity. Field excavation of archaeological sites, for purposes of evaluation, should follow State guidelines. All field supervisors must meet the Secretary of Interior's Professional Qualification Standards. Field technicians must have completed a formal archaeological field school at a recognized university, and must have experience with both inventory and evaluation methods of archaeological field survey. The following procedures will be used during the evaluation of prehistoric and historic archaeological sites.

1. Pre-field Preparation. An installation's CRM should provide field supervisors with the necessary background data to evaluate the archaeological site(s). Background data should include but not be limited to: the results of the identification survey during which the site was identified; the research design developed for the evaluation project; applicable historic contexts; results of evaluations or determinations of eligibility of similar or nearby sites; and environmental information (soils, geomorphology, known disturbances, topography, vegetation, etc.). If appropriate, field supervisors should be made aware of any utility lines, fiber optic cables and/or gas pipelines that might be present near any area where excavation may take place. Field survey forms for standardized site and survey recordation should be provided.

2. Field Methodology. No single method of field investigation is appropriate for all sites and usually a combination of techniques will yield the data necessary for complete evaluation. A method is acceptable if it can provide data on site size, date of the deposits, site structure and integrity. Methods may include the following (adapted from Guidelines for Public Archeology in Wisconsin:1997:47-8):

    a. Mapping. Maps should include topographic and environmental features as well as location of surface finds, positive shovel probes, cultural features and excavation units.
    b. Surface collection. All surface collection must maintain horizontal spatial control. If GPS is available, the locations of debris, tools or clusters may be logged as well as the perimeter of the site area. Surface collection is most appropriate for plowed fields or sites with very high ground-surface exposure. It should not be the only technique utilized for site evaluation.
    c. Shovel probe. This technique is appropriate for areas that are obscured by vegetation. It may be used as part of a sampling strategy or to assist in boundary definition, but never as the sole means of testing.
    d. Test excavation. Test excavation units sample the site area for subsurface features and provide assessments of site integrity and information potential. Units are excavated in either natural or arbitrary levels. This technique will be the most likely to result in information related to site date, cultural affiliation, site function, degree of preservation of organic remains, the presence of cultural features and/or activity areas, and disturbances.
    e. Removal of plow zone. This method will allow for examination of a greater percentage of the site area in less time. The plow zone should be removed to just above its base and the remainder removed by skim shovel. Mapping, surface collection and any sampling should occur prior to removal of the plow zone.
    f. Remote sensing. Methods in this category include aerial photo interpretation (defines site setting, site limits, internal site structure); ground-penetrating radar or resistivity and conductivity.

3. Analysis and Interpretation. All collected materials should be cleaned, labeled, catalogued and analyzed. Analysis includes the following:

    - description of all artifacts by type, including provenience, measurements and quantity;
    - description of how dates for the site were obtained;
    - description of diagnostic materials that includes type, date and photographs;
    - description of features including content, plan views and profiles;

- description of the soil matrix, horizons, disturbances, and site formation processes;
- description and interpretation of the spatial relationships of features and artifact concentrations within the site; and
- description of methodology for analysis of any paleoecological data collected from the site.

4. Technical Report Preparation. All evaluations should be documented in a technical report that meets State guidelines. Reports should be provided to consulting parties.

D.3 EVALUATION – BUILDINGS AND STRUCTURES

This section addresses issues that are specific to the evaluation of buildings and structures. The discussion below is designed to fit within the framework of the formal procedures for evaluation of all sites provided above.

A building or structure may qualify for inclusion in the National Register of Historic Places if it is associated with one of the National Register criteria for evaluation *and* retains historic integrity of those features sufficient to convey its significance. Usually a building or structure must be at least 50 years old to qualify unless it is of exceptional importance. Buildings and structures are usually determined significant under Criteria A (event), B (person) or C (design/construction). Evaluation of a building or structure must be conducted by an individual who meets the Secretary of Interior's Professional Qualification Standards for architectural history.

1. Field procedures for the evaluation of buildings and/or structures include the following activities.

    a. Archival Research: The goal of archival research is to collect information that will assist in determining the historic context a property is associated with and whether the property is significant within its historic context with regard to the National Register criteria. This body of data must conclusively associate the building or structure with an event or person under Criteria A or B or with distinctive architectural elements, the work of a master, or high artistic value under Criterion C. Sources that may be consulted include:

        i. historic and current maps;
        ii. historic photographs;
        iii. building drawings;
        iv. research files related to the building or installation that are archived at the State Historic Preservation Office;

v. Real Property records;
vi. County Historical Society museums and archives (state, county and local histories, historical documents, newspaper clippings);
vii. National Archives (if context is national)

b. Field Documentation. The purpose of field documentation is to record the building or structure as it exists today and will provide comparative information for assessment of integrity, its current condition, and locational setting. Field documentation includes the following activities:

i. Photography. Photographs should capture every facade. Sensitive buildings (ammunition depots, etc.) will not be photographed. [Researchers should brief the Public Affairs Office and Provost Marshall Office prior to photographing installation resources, and if necessary inform any residents of military housing areas by official letter that summarizes the project, obtains their permission, and coordinates the photographic documentation.] Structures, because of their simplicity, usually require a single photograph. Rectangular buildings require two, diagonally from opposite corners of the building. Complex buildings require more. Additional photos are necessary for architectural detail.

ii. Recordation. The following information should be recorded in notes from field observations. A form for standardized collection of field data is desirable.

Architectural style;
Plan/footprint of building;
Number of stories;
Roof type(s);
Roof material(s);
Foundation material(s);
Wall material(s)
Type and location of doors;
Type and location of windows;
Architectural details;
Condition of resource.

iii. Modifications to Building/Structure. Real Property records dates and brief descriptions of government building modifications such as rehabilitations, window replacement, and additions.

2. Determining Significance. The following are guidelines for determining whether a property is significant under the three criteria that usually apply to historic buildings and structures (adapted from NR Bulletin #16).

   a. Event: Under Criterion A, the building or structure must be documented to have existed at the time of the event or pattern of events and to have been importantly associated with those events. The association must be conclusive and not tenuous and the documentation must be through accepted means of historical research.

   b. Person: Under Criterion B, a building or structure must be associated with a person's productive (usually adult) life, reflecting the time when (s)he achieved significance. Properties that pre- or post-date the individual's significant accomplishments are usually not eligible unless there are no other properties that might qualify. The documentation must be through accepted means of historical research such as written or oral history. Properties associated with an important individual should be compared with other properties associated with the same individual to determine which best represent the person's historic contributions.

   c. Design/construction: Under Criterion C, properties are eligible for the National Register if they are significant for their physical design or construction, including such elements as architecture, landscape architecture, engineering, and artwork. To qualify under this Criterion, a property must satisfy at least one of the following:

      i. "Embody the distinctive characteristics of a type, period, or method of construction." Under this requirement, the property must reflect the way it was conceived, designed, or fabricated by a people or culture in past periods of history. "Distinctive characteristics" are the physical features or traits that are repeatedly encountered in individual types, periods, or methods of construction. "Type, period, and methods of construction" refer to the way certain properties are related to one another by cultural tradition or function, by dates of construction or style, or by choice or availability of materials and technology.

      ii. "Represent the work of a master." A master is an individual who is generally recognized as "great" in a field, a craftsman of consummate skill, or an anonymous craftsman whose work is distinguishable from others by its characteristic style

and quality. The property must express a particular phase in the development of the master's career, an aspect of his/her work, or a particular idea or theme in his/her craft.

iii. "Possess high artistic values." Under this requirement, a property is eligible if it articulates a particular concept of design such that it expresses an aesthetic ideal.

iv. "Represent a significant and distinguishable entity whose components may lack individual distinction." This requirement refers to districts. A district may be composed of a variety of resources but derives its importance from constituting a unified entity. Its varied resources are consequently interrelated, conveying a visual sense of the overall historic environment or arrangement of historically or functionally related properties. As for individual buildings or structures, a district must be significant as well as identifiable, and must be important for historical, architectural, archaeological, engineering, or cultural values. Districts will usually achieve significance under the last requirement of Criterion C plus Criterion A, B, additional portions of Criterion C, or D. A district may have both features that lack individual distinction and individually distinctive features that are focal points. None of the components may be distinctive provided that the grouping is significant as a whole within its historic context. Most of the components however, must have integrity, as well as the district as a whole. The district can also contain noncontributing elements, the number depending on how the noncontributing elements affect the integrity of the district as a whole.

EVALUATION – PROPERTIES OF TRADITIONAL RELIGIOUS AND CULTURAL IMPORTANCE

This portion of the SOP addresses procedures that are specific to the evaluation of properties of traditional religious and cultural importance.

1. Ensure that the entity under consideration is a property. The National Register does not include the traditional religious or cultural practices themselves, but rather the tangible property. The relationship between the beliefs and the property must be considered however, because the beliefs or practices may give the property its significance. Although construction by human beings is a necessary attribute of buildings and structures, it is not a requirement for sites, districts or objects. Sites, districts and objects may possess historic, cultural or archaeological

value and may be classified as properties even though there may be no physical evidence that an event or activity occurred there. When there is no observable evidence of human activity, documentary and/or oral evidence must be carefully assessed.

2. Consider the property's integrity.

    a. Does the property have an integral relationship to traditional, religious and cultural beliefs or practices? Is the property important to the transmission of the beliefs or practices?
    b. Does the condition of the property convey the relationship? Has the property been physically altered? Loss of integrity must be considered from the eyes of the practitioners. It is possible for property modifications to be accommodated into the practices.

3. Evaluate the property with respect to the National Register criteria.

    a. Events. Is the property associated with events that have made a significant contribution to the broad patterns of the group's traditional oral or recorded history?

        i. The property must be documented through accepted means of historical research, i.e. ethnography, folklore studies, historical and archaeological research.
        ii. The association of a property with an event that has made a significant contribution to a group's traditional history is acceptable as long as the tradition is rooted in the history of the group and the property is associated with the events.

    b. Persons. Is the property associated with persons significant in the group's past? "Persons" may refer to tangible human lives or to figurative people (gods, etc.) featured in the group's traditions.
    c. Design/Construction.

        i. Does the property embody the distinctive characteristics of a type, period, or method of construction? This criterion refers to buildings, structures and objects. Properties that satisfy this criterion have particular housing styles, landscaping, ornamentation that is distinctive to the group.
        ii. Does the property represent the work of a master? To be eligible under this criterion, the precise identity of the master is not necessary.
        iii. Does the property possess high artistic value? Is there art work that is highly valued by the group, for example petroglyphs?

iv. Does the property represent a significant and distinguishable entity whose components may lack individual distinction? This criterion refers to districts. Is the property an integral part of a larger entity (that may have tangible and intangible components) of traditional, religious and cultural importance?

d. Information Potential. (This criterion refers to mainly to archaeological properties.) Does the property have a history of yielding, or the potential to yield, information important in prehistory or history? The information must come from accepted means, e.g. ethnography, folklore studies, historical and archaeological research, etc. This criteria is usually secondary to the property's association with the traditional religion, history and culture of the group who value the property.

4. Determine whether any of the National Register criteria considerations apply (make the property ineligible).

a. Religious Ownership. Is the property owned by a religious institution or used for religious purposes? (The intention of this criteria consideration is to exclude properties considered significant for their religious doctrine.) Keep in mind that Euro-American distinctions between religion and culture do not exist for Native American societies. Is the religious use of the property intrinsic to the traditional cultural practices? If so, the property may not fall under this consideration

b. Relocated Properties. Significance is usually embodied in a property within its specific location and setting. This is not a typical problem for properties of traditional, religious and cultural importance. Portable objects, that remain in a historically appropriate setting or that were moved historically retain eligibility. Relocation of significant properties may be achieved without loss of significance if accomplished via consultation with the traditional group and the group continues to consider the property significant in its new location.

c. Birthplaces and Graves. If a birth site or grave is significant for reasons other than its association with the individual, the property may be eligible. Also, the group may ascribe cultural importance to the location such that its association contributes to its significance.

d. Cemeteries. Many properties of traditional, religious and cultural importance contain cemeteries that contribute to its importance.

The presence of a cemetery within such a property will not automatically make it ineligible.

e. Reconstruction. Reconstructed structures within the boundaries of a traditional religious and cultural property may not be eligible, however the property itself may be eligible.

f. Commemoration. When the design or function of a property is specifically commemorative, the property cannot be eligible for the National Register. The mere fact that commemoration is involved in the design or function however, does not automatically render the property ineligible.

g. Significance Achieved within the Past 50 Years. Typically properties achieving significance within the last 50 years are not eligible for the National Register unless sufficient historical perspective exists to determine that the property is exceptionally important and will continue to retain that importance. Breaks in the continuity of use does not automatically disqualify a property from eligibility. Use of a site may not be obvious, and although indirect evidence regarding a property's use is acceptable, it must be carefully weighed.

5. Documenting Properties of Traditional, Religious and Cultural Importance. Interviews and observations must record the behavior, beliefs and knowledge that are germane to understanding the property's cultural significance. Acceptable sources of data include "appropriate tape recordings, photographs, field notes, and primary written records." Due to the sensitive nature of traditional practices and beliefs, documentation of properties of traditional religious and cultural importance presents unique difficulties and challenges as enumerated below.

a. Traditional peoples are often reluctant to share traditional, cultural and religious values to agencies or outsiders. In some instances, it may be appropriate to identify the areas that traditional peoples consider sensitive during the consultation process and then avoid or minimize use of those areas. Although this strategy will not result in property documentation or National Register nomination, avoidance is always an acceptable means of historic property treatment.

b. Not only the physical characteristics of the property need to be described but also culturally significant aspects of the property that may be apparent only to traditional people. Property description should include present and if possible historical

appearance as well as how it is described “in the relevant traditional belief or practice” which may include metaphorical depictions.

c. The period of significance should include when the property first became significant (the specified period may or may not reflect European-American definitions of time) and/or when the property was in use for traditional purposes. This information may be linked with events or persons that are associated with the site.

d. Considerations in boundary definition include the use to which the property was put; changes in boundaries through time; viewsheds that may be significant to the property; where traditional use ends or where the traditional use is no longer reflected in the physical aspects of the area.

EVALUATION – MILITARY CULTURAL LANDSCAPES

The guidelines presented in this section are condensed from Loechl et al. (n.d.). Complete textual content is located at www.aec.army.mil.

Evaluation of cultural military landscapes involves three activities: defining its significance, assessing its integrity, and establishing boundaries. Information collected during field investigation and archival research will help determine which properties within the landscape possess characteristics of importance and what those characteristics represent. Significance, integrity, and boundaries depend on the presence and condition of tangible landscape features associated with the establishment and development of the installation. Evaluation results in a determination of contributing and non-contributing resources and the definition of the boundaries of a historic military landscape. Below are the procedures for evaluating military cultural landscapes.

1. Define Significance. Defining significance involves summarizing the landscape history, producing a set of maps that represent spatial and temporal development of the military reservation, and finally determining the significance of the landscape resources using National Register criteria.

   a. Summarize the landscape history.
      i. Review all relevant historic base material (maps, document, etc.);
      ii. Prepare historic base maps for significant periods of development, based upon site history;
      iii. Identify contributing features from each historic period, i.e. which features developed during specific historic periods

changed or altered the landscape in a critical or defining manner;

iv. Prepare current base map;

v. Compare current base map with historic base maps;

vi. Develop preliminary map of surviving historic landscape features;

b. Apply National Register criteria. A property is determined significant if it is associated with one or more of the four criteria discussed is Section A.4 of this SOP. Criteria considerations must also be taken into account for properties that are not usually considered for listing in the National Register such as cemeteries, birthplaces or graves. Of particular interest to military properties is the “50-year rule.” Many military properties are associated with exceptionally important national and international events that have occurred within the last 50 years and are consequently considered significant even though they are not 50 years old. National Register Bulletin 22 provides guidance for evaluating these properties.

c. Determine periods and areas of significance.

i. A property’s period of significance is the span of time when a property was associated with important events, activities, persons, cultural groups, and land uses or attained important physical qualities or characteristics. Although it may be short, more often it extends many years, covering a series of events, continuum of activities, or evolution of physical characteristics. Properties may have more than one period of significance.

ii. Areas of significance represent themes of historic development in which a property made contributions. Most historic military landscapes are significant under the theme *military*. Other relevant themes include archaeology, architecture, community planning and development, or maritime history.

d. Write a statement of significance. This is a narrative that describes why the property was important and how, through its characteristics, it is directly related to specific historic contexts, National Register criteria, areas and periods of significance, and criteria considerations. The important events, persons, activities and physical qualities are discussed in relation to specific features identified by the historic military landscape characteristics.

i. Field check preliminary maps developed in steps (1)(a)(vi) above to determine accuracy and necessary additions.
ii. Refine map of surviving contributing historic landscape features.

2. Assess integrity in accordance with the seven qualities that are described in Section A.6 above. Decisions about the integrity of historic landscapes require professional judgments about whether the property today reflects the spatial organization, physical components, and historical associations that it attained during the periods of significance. While no landscape will appear exactly as it did fifty or 100 years ago, historic landscapes with integrity retain recognizable qualities of their past.

   a. Develop a statement of integrity for the entire study area as well as individual landscape units, as needed.
   b. Develop a final map of contributing landscape characteristics. This map should contain only those features that contribute to the landscape's integrity.

3. Establish boundaries.
   a. Select edges. National Register boundaries must encompass a concentration or continuity of historic military landscape characteristics. The boundaries should include resources that have both historic significance and integrity. Boundaries must be fixed in space and capable of accurate description by mapping coordinates or legal description.
   b. Sites and dis-contiguous districts. Historic military landscape characteristics should predominate and occur throughout the area being proposed for nomination. Peripheral areas having a concentration of non-historic features should be excluded, while the impact of centrally located non-historic features on historic integrity should be considered. If, because of their density, distribution, and predominance, non-historic features seriously fragment the overall historic integrity of large-scale landscapes, smaller areas or individual resources having integrity should be identified for listing.

APPENDIX I – ARMY HISTORIC BUILDING MANAGEMENT STANDARDS

The following army standards (DA PAM 200-4) were developed to assist in the maintenance and rehabilitation of historic buildings at installations and should be used in conjunction with the *Secretary of Interior's Standards for Rehabilitation and Guidelines for Rehabilitating for Rehabilitating Historic Buildings* and the *Secretary of the Interior's Guidelines for the Treatment of Historic Landscapes*. In some instances, the Army standards are more specific and take precedence over the Secretary's Standards. The Army Standards emphasize the importance of repair, replacement, and rehabilitation of National Register eligible or listed buildings, structures, or site elements, yet recognize the need to accommodate current operation and fiscal responsibilities. A least-cost, lifecycle economic analysis of major maintenance and rehabilitation projects should be conducted prior to initiation and include such factors as asbestos and lead paint abatement.

Site and Landscape

a. Preserve the relationship between buildings, historic military landscape elements, and open space. New construction shall be compatible with the architectural character of the Historic Property or District. Maintain grades sloping away from historic buildings.
b. Where historic landscaping has been neglected or where there is no landscaping, the installation may develop a Historic Military Landscape Plan. Guidance for developing such historic landscape plans are included in "Guidelines for Evaluating Military Landscapes: An Integrated Approach" available at www.apgea.army.mil.
c. Retain site elements that are important in defining the overall character of the historic property. Retain and maintain structures, furnishings, and objects that remain from the period of significance.
d. Remove, and replace as required, furnishings and objects such as light fixtures, fences, benches, and trash receptacles that were placed in the landscape after the period of significance and which do not contribute to the overall character of the historic property.
e. Provide fencing enclosures that are appropriate and enhancing, (that is, cast aluminum fencing, stockade fencing, hedges, and brick walls are more appropriate than chain link fencing which should be minimized and appropriately screened with planting.)
f. Accommodate required parking, including access for the physically disabled, without intrusion to the buildings or to historically significant areas and spaces. Screen parking from public view to reduce its impact on historic properties.
g. Acquire landscape furnishings and objects that are similar to those that existed in the landscape during the period of significance. New landscape furnishings and objects should match the original in size, materials, finishes, and placement within the site design.
h. Signage should be consistent with the character of historic properties.

Concrete/Masonry

a. Maintain concrete and masonry elements that are important in defining the overall historic character of each building or structure. Remove concrete that is inconsistent with the original concrete in color, texture and workmanship and replace with concrete to match the original. Remove masonry that is inconsistent with the original stone, brick, mortar, and stucco and replace with masonry to match the original.
b. Analyze existing concrete and mortar so that a compatible mix can be made for repairs. New concrete should match the original in color, texture and workmanship. Replacement mortar should be of the same strength and composition as the original.
c. Masonry surfaces shall be protected and maintained consistent with the original design. When repair is no longer practical, replacement of elements will be done to match the original. Repair chimneys to match original designs.
d. Repaint where spalling has occurred at lintels. Repair or replace stone steps and stoops where damaged by rusting ironwork. Remove exterior carpeting and concrete overlayments from steps and stoops. Infill with masonry to match original and remove non-original materials.
e. Retain the extant texture and color of masonry surfaces. Where masonry has been inappropriately painted, return it, with proper documentation, to its original painted color.

Metals

a. Metal elements that contribute to the architectural character of a building or structure should be retained and preserved. Also, retain and preserve the si8ze, the shape, and the type of finish, its historic color, and accent scheme.
b. Copper and bronze should not be painted or coated. Other metals should be painted to protect them from the elements.
c. Retain, rather than replace, architectural metal elements when repair of the element and limited replacement of deteriorated or missing parts can be accomplished.
d. Reinstall copper or other metal gutters and downspouts to match the original design where an inappropriate replacement material now exists. Reconfigure non-original roof leaders.
e. Clean and paint steel lintels prior to repointing. Rework iron railings with fewer penetrations into stone masonry. Remove rust; repaint and reinstall railings.

Wood

a. Interior and exterior wood elements that contribute to the historic character of the building should be retained and preserved. Original cornices and brackets, architraves, door surrounds, pediments, newels, banisters, railings, moldings, casings, mantels, paneling, cabinetwork, and other wood elements should remain as original fabric with repairs. Replace in-kind only if the original cannot be repaired. Replace functional

elements that were once a part of the original fabric and are now missing.

b. Retain historic finishes and color schemes to preserve the historic character of the exterior. Repaint wood only as needed with materials and colors that are appropriate to the historic building or district.
c. Remove paint buildup from woodwork, sand, prime, and repaint; reglaze windows and doors as required. Caulk as required.
d. Avoid vinyl, aluminum, or other artificial sidings.
e. Repairs shall match the original woodwork in design, size and shape.
f. When necessary, replace wooden porch flooring and steps with weather-treated, painted wood.

Doors and Windows

a. Doors and windows and associated trim that contribute to the historic character of the buildings or the district shall be retained and preserved. Remove non-original doors and windows that compromise the integrity of the original and replace with units to match the original or that match adjacent structures. Retain, repair, and maintain historic hardware where it exists. Replacement hardware should match the original in size, shape, and configuration.
b. Maintain the operating condition of the doors and windows. Locate weather-stripping to facilitate operation.
c. Maintain the historic appearances of windows and doors and their frames through retention of designs, materials, finishes, and colors including the configuration of sashes and muntins, depth of reveals, molding profiles, and the reflectivity and color of the glazing.
d. Combination storm and screen doors shall be simple and discreet, of one panel or with glazing or screening divisions that are aligned with the door it protects and without ornamentation.
e. The checkrail of storm windows shall align with the checkrail of the historic window. Glazing divisions shall coincide with the window it protects.
f. Provide protective glazing where the weather demands it. Protective glazing should be as unobtrusive as possible and should be removable without damaging historic fabric. Repair original leaded glass and replace where removed. Replacement elements shall match the original. (If using the same kind of materials is not feasible, then a compatible substitute material that conveys the visual appearance and design of the surviving parts and is physically compatible may be considered.)
g. When feasible within the existing historic fabric of the house, use an interior door to create a heat-conserving vestibule. Absent this feasibility, provide storm doors.
h. Maintain appropriate existing storm windows and provide storm windows where nonexistent. Equip existing doors and windows with weather-stripping.
i. Maintain integrity of caulking and sealants at doors and windows.

Roofing

a. Retain character-defining roof shapes and roofing materials, rather than introducing incompatible materials and designs, or improper installation techniques. Retain the configuration of existing roofs without the addition of new elements that diminish the historic character.
b. Roofing material shall be appropriate to the style and period of the buildings or neighborhood. Retain original sound historic clay tile and historic slate roofing materials and architectural metal. Return nonconforming roofs to original when replacement is necessary.
c. All repairs shall match the original design and materials.
d. Retain roof ventilation to preserve elements of construction. Provide ventilation if it is nonexistent or adequate in an inconspicuous manner away from public view.

Porches/Entrances

a. Retain historic entrances and porches that are character-defining elements of the building. Significant elements include doors, fanlights, sidelights, pilasters, entablatures, columns, brackets, rails, and stairs.
b. Where a porch has not been enclosed, it shall remain open. Where screening has been provided, paint the wood framing of the non-original porch screening a dark color to reduce visual impact of the framing.
c. Repair rather than replace an entire porch or entrance element when repair of the element and limited replacement of deteriorated or missing parts is appropriate.
d. When repair is no longer practical, replacement elements shall match the original. If using the same kind of material is not feasible, then a compatible substitute material that conveys the visual appearance and design of the surviving parts and is physically compatible may be considered.
e. In exception to the preceding standard, replace column bases with aluminum where deteriorated.
f. Provide barrier-free access where necessary through removable or portable, rather than permanent ramps. Do not remove historic steps, bur rather, ramp above them. Locate barrier-free access to minimize visual intrusion and impact on the structure.

Interiors

a. Retain and preserve interior elements and finishes that are important in defining the overall historic character of the buildings. These elements include but are not limited to columns, cornices, chair rails, baseboards, fireplaces and mantels, brick, stone, tile, light fixtures, paneling, built-in cabinetry, hardware, flooring, plaster and may include plumbing fixtures.
b. Public spaces such as reception halls, entrance spaces, entrance halls, parlors, dining rooms, and libraries are important in defining the overall historic character of the building. Size, configuration, and proportion of

these spaces should be maintained. Where alterations have occurred they should be removed to restore the plan to the original design.

c. Maintain character-defining interior spaces by not cutting through floors, lowering ceilings, removing walls, or installing new partitions.

d. Reuse decorative material or elements that were removed during rehabilitation work including wall and baseboard trim, door molding, paneled doors, and wainscoting.

e. Remove excessive paint build-up from character defining elements with due regard to disposition of hazardous materials. Prime and repaint from approved palette of colors.

f. Maintain the finishes or colors of historic woodwork. For example, do not paint a previously varnished wood element, or strip historically painted wood surfaces to bare wood to create a “natural look,” or remove historic plaster to expose brick.

g. New materials that obscure or damage character-defining interior elements shall not be installed. Likewise, paint, plaster, or other finishes on historically finished surfaces shall not be removed in an effort to create a new appearance.

h. Remove, clean, lacquer, and reinstall original hardware. Return original doors to designated openings.

i. Provide bathrooms with vanities, storage and modern plumbing only when necessary due to the deterioration of the original materials or fixtures. When replacement is necessary, bathroom fixtures should resemble the originals.

j. Provide kitchens with adequate cabinets, work surfaces and appliances. Provide closets and storage when necessary. Maintain consistency of design elements throughout. Historic cabinetry should be retained where feasible.

k. Encourage use of original wood floors with carpet as area rugs and stair runners.

l. Sand wooden floors only when it is absolutely necessary, rather than at the change of occupancy.

m. Promote accessibility for the disabled by providing toilet facilities on each floor level.

HVAC

a. Remove all asbestos from heating and water lines.

b. Install mechanical systems and service equipment when required, that causes minimal alteration to the building’s floor plan and the principal exterior elevations, and the least damage to historic building materials and volume of principal rooms. Remove intrusive ductwork from principal rooms and provide alternate sources of supply.

c. Install mechanical systems and service equipment so that character-defining structural or interior elements are not radically changed, damaged, or destroyed.

d. Exterior walls shall not be cut for installation of HVAC units. Remove units that have been cut through exterior walls.
e. De-emphasize presence of exterior HVAC units with screening or landscaping.
f. Conceal kitchen and bath exhaust pipes from public view.

Electrical

Ensure proper service and distribution of electric current. Provide underground supply of power, phone and cable provided that such installation does not affect archaeological resources. Rewire buildings to new service entries. Internally wire for cable and phone, removing existing conduits and wiring from exterior. Conceal all exposed conduits and ensure adequacy of outlets. Replace missing character-defining light fixtures with those appropriate to the character of the original exterior and interior. Where possible, replicate existing original fixtures or introduce fixtures appropriate to the period.

Structural

Verify structural loading of all floors to be occupied. Correct any structural deficiencies before rehabilitation or restoration.

Energy Conservation

Energy conservation will be achieved by appropriate insulation or other appropriate methods that do not radically change, damage or destroy character-defining features.

APPENDIX J – SECRETARY OF THE INTERIOR'S STANDARDS FOR THE TREATMENT OF HISTORIC STRUCTURES

Preservation:

The act or process of applying measures necessary to sustain the existing form, integrity, and materials of a historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project. [See DA PAM 200-4, Appendix D.]

Standards for Preservation:

1. A property shall be used as it was historically, or be given a new use that maximizes the retention of distinctive materials, features, spaces, and spatial relationships. Where a treatment and use have not been identified, a property shall be protected and, if necessary, stabilized until additional work may be undertaken.

2. The historic character of a property shall be retained and preserved. The replacement of intact or repairable historic materials or alteration of features, spaces, and spatial relationships that characterize a property shall be avoided.

3. Each property shall be recognized as a physical record of its time, place, and use. Work needed to stabilize, consolidate, and conserve existing historic materials and features shall be physically and visually compatible, identifiable upon close inspection, and properly documented for future research.

4. Changes to a property that have acquired historic significance in their own right shall be retained and preserved.

5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.

6. The existing condition of historic features shall be evaluated to determine the appropriate level of intervention needed. Where the severity of deterioration requires repair or limited replacement of a distinctive feature, the new material shall match the old in composition, design, color, and texture.

7. Chemical or physical treatments, if appropriate, shall be undertaken using the gentlest means possible. Treatments that cause damage to historic materials shall not be used.

8. Archaeological resources shall be protected and preserved in place. If such resources must be disturbed, mitigation measures shall be undertaken.

Preservation as Treatment:

When the property's distinctive materials, features, and spaces are essentially intact and thus convey the historic significance without extensive repair or replacement; when depiction at a particular period of time is not appropriate; and when a continuing or new use does not require additions or extensive alterations, Preservation may be considered as a treatment. Prior to undertaking work, a documentation plan for Preservation should be developed.

Rehabilitation.

The act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey it historical, cultural, or architectural values.

Standards for Rehabilitation:

1. A property shall be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.

2. The historic character of a property shall be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property shall be avoided.

3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, shall not be undertaken.

4. Changes to a property that have acquired historic significance in their own right shall be retained and preserved.

5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.

6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and where possible, materials. Replacement of missing features shall be substantiated by documentary and physical evidence.

7. Chemical or physical treatments, if appropriate, shall be undertaken using the gentlest means possible. Treatments that cause damage to historic materials shall not be used.

8. Archaeological resources shall be protected and preserved in place. If such resources must be disturbed, mitigation measures shall be undertaken.

9. New additions, exterior alterations, or related new construction shall not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and shall be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

10. New additions and adjacent or related new construction shall be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Rehabilitation as a Treatment:

When repair and replacement of deteriorated features are necessary; when alterations or additions to the property are planned for a new or continued use; and when its depiction at a particular period of time is not appropriate, Rehabilitation may be considered as a treatment. Prior to undertaking work, a documentation plan for Rehabilitation should be developed.

Restoration.

The act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project.

Standards for Restoration:

1. A property shall be used as it was historically or be given a new use which reflects the property's restoration period.

2. Materials and features from the restoration period shall be retained and preserved. The removal of materials or alteration of features, spaces, and spatial relationships that characterize the period shall not be undertaken.

3. Each property shall be recognized as a physical record of its time, place, and use. Work needed to stabilize, consolidate and conserve materials and features from the restoration period shall be physically and visually compatible, identifiable upon close inspection, and properly documented for future research.

4. Materials, features, spaces, and finishes that characterize other historical periods shall be documented prior to their alteration or removal.

5. Distinctive materials features, finishes, and construction techniques or examples of craftsmanship that characterize the restoration period shall be preserved.

6. Deteriorated features from the restoration period shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and, where possible, materials.

7. Replacement of missing features from the restoration period shall be substantiated by documentary and physical evidence. A false sense of history shall not be created by adding conjectural features, features from other properties, or by combining features that never existed together historically.

8. Chemical or physical treatments, if appropriate, shall be undertaken using the gentlest means possible. Treatments that cause damage to historic materials shall not be used.

9. Archaeological resources affected by a project shall be protected and preserved in place. If such resources must be disturbed, mitigation measures shall be undertaken.

10. Designs that were never executed historically shall not be constructed.

Restoration as a Treatment:

When the property's design, architectural, or historical significance during a particular period of time outweighs the potential loss of extant materials, features,

spaces, and finishes that characterize other historical periods; when there is substantial physical and documentary evidence for work; and when contemporary alterations and additions are not planned, Restoration may be considered as a treatment. Prior to undertaking work, a particular period of time, i.e., the restoration period, should be selected and justified, and a documentation plan for Restoration developed.

Reconstruction.

Reconstruction is defined as the act or process of depicting, by means of a new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location.

Standards for Reconstruction:

1. Reconstruction shall be used to depict vanished or non-surviving portions of a property when documentary and physical evidence is available to permit accurate reconstruction with minimal conjecture, and such reconstruction is essential to the public understanding of the property.

2. Reconstruction of a landscape, building, structure or object in its historic location shall be preceded by a thorough archaeological investigation to identify and evaluate those features and artifacts which are essential to an accurate reconstruction. If such resources must be disturbed, mitigation measures shall be undertaken.

3. Reconstruction shall include measures to preserve any remaining historic materials, features, and spatial relationships.

4. Reconstruction shall be based on the accurate duplication of historic features and elements substantiated by documentary or physical evidence rather than on conjectural designs or the availability or different features from other historic properties. A reconstructed property shall re-create the appearance of the non-surviving historic property in materials, design, color, and texture.

5. A reconstruction shall be clearly identified as a contemporary re-creation.

6. Designs that were never executed historically shall not be constructed.

Reconstruction as a Treatment:

When a contemporary depiction is required to understand and interpret a property's historic value (including the re-creation of missing components in a

historic district or site); when no other property with the same associative value has survived; and when sufficient historical documentation exists to ensure an accurate reproduction, Reconstruction may be considered as a treatment. Prior to undertaking work, a documentation plan for Reconstruction should be developed.

More detailed information on the Secretary's Standards may be obtained at:

http://www2.cr.nps.gov/tps/tax/rhb/

APPENDIX K - INADVERTENT DISCOVERY OF NATIVE AMERICAN HUMAN REMAINS AND ASSOCIATED FUNERARY OBJECTS, SACRED OBJECTS, OR OBJECTS OF CULTURAL PATRIMONY

FSH has developed internal draft SOPs (30 September 2001) that are designed to ensure compliance with the provisions of NAGPRA . Much of the following text is from the draft SOPs. Although the potential for discovery of Native American human remains and funerary objects at FSH is low, procedures are necessary for that unexpected encounter. Such human remains and cultural objects must be identified, if possible, as to lineal descendants or culturally affiliated contemporary tribes, treated in a manner deemed appropriate by the lineal descendants or culturally affiliated tribes, and repatriated to legitimate claimants.

In the event of a discovery of Native American human remains or cultural objects, the Installation Commander will ensure compliance with NAGPRA and the pertinent statutory and regulatory requirements of the laws and regulations listed above. If Native American remains and cultural objects are discovered, any work within a 50-foot radius of the site shall be halted and the CRM notified immediately.

The CRM will coordinate with the following:

- Installation Commander
- Office of Staff Judge Advocate (OSJA)
- Criminal Investigation Division (CID)
- Provost Marshal's Office (PMO)
- PWBC Master Planning Office
- Readiness and Logistics Business Center (RLBC)

If necessary, the PMO or CID will notify the Bexar County Sheriff if the remains are determined to be other than prehistoric.

The site will be protected and stabilized. Any removal of materials is prohibited and constitutes a violation of NAGPRA and ARPA. The CRM, in consultation with qualified professional archeologists as necessary, will initially evaluate the site and report the findings to the Installation Commander and the potentially affiliated Native American tribes, installation offices, and the SHPO. If the remains are determined to be of aboriginal origin, NAGPRA requires that, upon an unexpected discovery of human remains, further construction or archeological activities in the area of discovery cease for 30 days after the appropriate tribal group has been officially notified. Any subsequent treatment of the remains and objects or stabilization of the site will be carried out only after consultation with the potentially affiliated tribes.

Removal of the human remains may proceed when:

The consent of the appropriate tribal group(s) is received;
Ownership and right-of-control of such items is not in dispute; and
Proof of consultation and notification is documented by written correspondence with the appropriate tribes.

FSH has conducted studies to determine which federally recognized tribes should be consulted under NAGPRA. These tribes are:

Mescalero Apache **(represent Lipan Apache [not federally recognized] also)**
Comanche
Kiowa/Kiowa Apache
Tonkawa
Wichita
Caddo

Although the Coahuitecans are not federally recognized, it is recommended that they be consulted through a federally recognized tribe.

Although not required, the establishment of procedures and agreements with the Native American tribe(s) for the treatment of unmarked burials in the event of an unexpected discovery would allow FSH to forego much of this lengthy process. Anticipating such a possibility, a Memorandum of Understanding (MOU) or MOA may be established, according to the nature of the accord, with the appropriate federally recognized tribe(s) that would expedite the review process and override the mandated 30-day work stoppage.

PROCEDURE

Preliminary Assessment, Protection, and Verification

Step 1: When notified of the possible inadvertent discovery of buried human remains or cultural objects, the CRM and an archeologist will arrange to visit the site within twenty-four (24) hours of the discovery to determine if the remains are (1) associated with a recent crime scene or (2) if not, whether the remains are of Native American descent (Figure 4-8).

Step 2:If, upon examination, the remains are identified as nonhuman, the CRM and archeologist will determine if archeological contexts are present that need to be evaluated pursuant to Section 106 [36 CFR Part 800] of the NHPA [16 U.S.C. 470-470w].

Step 3:If, upon examination, the remains appear to be human and associated with a crime scene of 75 years old or less, the CRM will notify the PMO and the CID. The CID or PMO will determine whether or not to notify the Bexar County Sheriff's Department. All activities will cease within the area of the inadvertent discovery. The site will be protected and declared off limits to everyone except authorized personnel. The area of protection should cover no less than a 50-foot radius around the site. The CID will assume custody of the remains and notify the proper authorities.

Step 4:If, upon examination, the remains appear to be human, but are not associated with a crime scene, or if all law enforcement officials contacted have determined that the remains will not be involved in a legal investigation, the CRM will contact the SHPO. This procedure is applied whether or not the remains are of Native American descent.

Step 5: If, after consultation with the SHPO, the remains are determined to be of Native American descent and not associated with a crime, the CRM or the archeologist must make a written field evaluation of the circumstances of the discovery, the condition and contents of the burial, including any artifacts, the primary context of the remains and any artifacts, and their antiquity and significance. The human remains and cultural objects will be evaluated in situ. Destructive analysis is prohibited. The CRM or the archeologist may consult with a qualified physical or forensic anthropologist, if necessary. The site will be protected according to standard installation practice for archeological discoveries. Stabilization or covering may be employed, if necessary. Removal of material shall not resume until compliance with this SOP regarding resumption of activity is completed.

A preliminary assessment of whether NAGPRA applies to a discovery of human remains may take considerable time and coordination with qualified

professionals. Therefore, the CRM should make arrangements with qualified professionals, such as physical or forensic anthropologists, who are willing to aid in situ identifications before an inadvertent discovery of human remains occurs.

Notification of the Responsible Federal Agency Official (Installation Commander)
[43 CFR § 10.4]

Step 1:When the CRM receives notification of an inadvertent discovery of Native American human remains and/or cultural objects, immediate telephone notification must be provided to the Installation Commander or his/her official designee. This telephone notification will be followed immediately by written notification that contains the results of the field evaluation and a plan of action to inform the Installation Commander of the intended consultation tasks and disposition of the discovered objects.

Step 2: No later than 48 hours after receipt of written confirmation from the CRM, the Installation Commander or his/her official designee will forward to the CRM the certification that the Memorandum of Notification has been received.

Contracts for archeological investigations and construction on installation lands will include the requirement to notify the CRM immediately upon discovery of human remains or cultural objects. The PWBC Master Planning Office, RLBC, and HQ office will be provided guidance to notify the CRM immediately upon discovery of human remains or cultural objects.

Notification of Native American Tribes

Step 1:No later than three (3) working days after receipt of written notification by the Installation Commander of the discovery of Native American human remains and/or cultural objects, the CRM shall notify possible lineal descendants, the Native American tribe which has the closest cultural affiliation with such remains or objects, the Native American tribe that is recognized as aboriginally occupying the area in which the objects were discovered, or any other Native American tribe having a possible relationship with such remains or objects.

Notification shall occur (1) by telephone and (2) by written notification which includes the Memorandum of Notification of the Installation Commander signed by the Installation Commander and the field evaluation described in this SOP under Preliminary Assessment, Protection, and Verification (Step

4). For telephone notification, the date, time, and person contacted will be recorded in a phone log, and the conversation documented in a Memorandum for Record. Notices will be sent by certified mail to the lineal descendant or official NAGPRA contact person designated by the tribe. If the official NAGPRA contact person is the tribal chairperson, the letter will be sent to him/her via certified mail and a copy furnished to the NAGPRA coordinator. Follow-up phone calls will be made to the lineal descendants or NAGPRA coordinators of the Native American tribes contacted to determine if written notification of the discovery was received by the appropriate person and to ascertain how the tribe wishes to proceed in determining cultural affiliation, treatment, and disposition of the human remains or cultural objects.

Step 2: Decisions on which tribes to notify will be based on the order of priority of ownership described in 25 U.S.C. 3002 and 43 CFR § 10.6, information in the Native American contacts file maintained by the CRM, and the list of tribal contacts.

The list of tribal contacts (see Appendix D) will be maintained by the CRM and will be verified and/or updated annually in coordination with tribal election schedules.

Identification of Native American Human Remains

Step 1: Identification of Native American human remains and/or cultural objects will be made in situ unless they have already eroded from their original location or have been removed from their original resting place by accident or as a result of looting. If an in situ identification of the remains cannot be made, the potential culturally affiliated tribes will be consulted pursuant to 43 CFR § 10.3(b), and further identification procedures will be discussed.

If necessary, the FSH CRM will coordinate the identification of Native American human remains and/or cultural objects with qualified archeologists, forensic or physical anthropologists, or cultural anthropologists who will record their recommendations and all data necessary to make the identification, including any additional information that can contribute to the determination of lineal descendants or cultural affiliation.

Step 2: Preliminary determination of lineal descendants or closest affiliation will be sent to the previously notified tribes to review. A time and place for consultations will be proposed. Traditional religious leaders should also be identified and consulted. The tribes may have additional information to contribute to the identification of lineal descendants or cultural affiliation. Representatives of tribes may decide to visit the site to verify the identification. A list of all Native

American tribes consulted regarding the particular human remains and/or cultural items will also be provided to each consulting tribe.

Step 3: Consultation must result in a written plan of action in accordance with 43 CFR § 10.5(e) or CA in accordance with 43 CFR § 10.5(f) between the appropriate tribes and the Installation Commander or his/her designee. Development, review, and signature of the CA follow Army protocol specified in AR 200-4. The FSH CRM, acting on behalf of the Installation Commander, may prepare the written plan of action or CA. The Installation Commander approves and signs all NAGPRA documents. Copies of the written plan of action are provided to the consulting lineal descendants and Native American tribes. Parties covered in a CA must agree to be signatories.

Resumption of Activity

The 43 CFR § 10.4(d)(2) specifies:

> The activity that resulted in the inadvertent discovery of Native American human remains or cultural objects may resume thirty (30) days after certification by the Installation Commander of the receipt of the notification sent by the CRM, if otherwise lawful. Any impacts to the site must be evaluated pursuant to Section 106 [36 CFR Part 800] of the NHPA [16 U.S.C. 470-470w].
> Environmental consideration under the NEPA may be required prior to continuing the activity. This may be a supplement to the NEPA analysis which was conducted prior to initiating the activity, and should consider the effect of the activity on the “find” in question, as well as the effect, if any, on any other “finds” in the vicinity. Removal or excavation of Native American human remains and/or cultural objects must be carried out in accordance with 43 CFR § 10.3.
> Or, activity may resume if the treatment is documented in a written binding agreement between the installation and the affiliated Native American tribes that adopts a plan for stabilization and protection of the site with no removal of human remains and/or cultural objects, excavation or removal of the human remains or cultural objects in accordance with 43 CFR § 10.3, or their disposition to lineal descendants or Native American tribe(s) with priority of custody as defined in 25 U.S.C. 3002(a) and 43 CFR § 10.6.
> In no event may activity resume until the SHPO or local law enforcement officials approve.